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=> d his ful

     FILE 'REGISTRY' ENTERED AT 14:21:19 ON 28 NOV 2004
                E CMDS/CN
                E CMDBS/CN

     FILE 'HCAPLUS' ENTERED AT 14:21:37 ON 28 NOV 2004
L1            10 SEA ABB=ON  ?FIBROS?(W)(?SMOOTH?(W)?MUSCL? OR ?MESENCHYM? OR
                 ?MESODERM?)
L2             0 SEA ABB=ON  L1 AND (?CMDS? OR ?CMDBS? OR ?CARBOXYMETHYL?(W)?DEX
                 TRAN?(W)?SULFAT?)
L3             0 SEA ABB=ON  L1 AND (?CICATRIZ? OR ?SCAR?)
                 E BARRITAULT DENIS/AU
L4           171 SEA ABB=ON  ("BARRITAULT D"/AU OR "BARRITAULT D S"/AU OR
                 "BARRITAULT DENIS"/AU OR "BARRITAULT DENIS STEPHAN CHARLES"/AU
                 OR "BARRITAULT DENIS STEPHEN CHARLES"/AU)
                 E CARUELLE JEAN PIERRE/AU
L5            68 SEA ABB=ON  ("CARUELLE J P"/AU OR "CARUELLE JEAN PIERRE"/AU)
L6            55 SEA ABB=ON  L4 AND L5
L7            25 SEA ABB=ON  L6 AND ?POLYMER?
                 SELECT RN L7 1-25

     FILE 'REGISTRY' ENTERED AT 14:29:02 ON 28 NOV 2004
L8            59 SEA ABB=ON  (9004-54-0/BI OR 106096-93-9/BI OR 9050-30-0/BI OR
                 250375-83-8/BI OR 62031-54-3/BI OR 9005-49-6/BI OR 9004-06-2/BI
                  OR 106096-92-8/BI OR 119684-05-8/BI OR 37288-39-4/BI OR
                 57821-29-1/BI OR 9001-90-5/BI OR 9042-14-2/BI OR 227322-59-0/BI
                  OR 9002-07-7/BI OR 338946-64-8/BI OR 146480-35-5/BI OR
                 146480-36-6/BI OR 171235-75-9/BI OR 182230-28-0/BI OR 197014-62
                 -3/BI OR 227322-58-9/BI OR 250375-82-7/BI OR 250375-87-2/BI OR
                 250375-90-7/BI OR 361378-81-6/BI OR 39422-83-8/BI OR 5470-44-0/
                 BI OR 76652-44-3/BI OR 9044-05-7/BI OR 923-06-8/BI OR 100-51-6/
                 BI OR 107-18-6/BI OR 1080-06-4/BI OR 112-67-4/BI OR 112-77-6/BI
                  OR 124861-55-8/BI OR 128635-03-0/BI OR 140208-24-8/BI OR
                 227322-60-3/BI OR 24967-94-0/BI OR 250375-98-5/BI OR 250376-01-
                 3/BI OR 2577-90-4/BI OR 51-21-8/BI OR 515-74-2/BI OR 56-84-8/BI
                  OR 617-45-8/BI OR 62229-50-9/BI OR 70226-44-7/BI OR 78-92-2/BI
                  OR 79-11-8/BI OR 88850-36-6/BI OR 9011-18-1/BI OR 9024-13-9/BI
                  OR 9054-89-1/BI OR 9056-36-4/BI OR 94765-65-8/BI OR 94765-66-9
                 /BI)

     FILE 'HCAPLUS' ENTERED AT 14:29:13 ON 28 NOV 2004
L9            24 SEA ABB=ON  L7 AND L8
L10            8 SEA ABB=ON  L9 AND ?PREP?

     FILE 'REGISTRY' ENTERED AT 14:38:10 ON 28 NOV 2004
                E 79-11-8DP/RN
                E 79-11-8P/RN
L11           11 SEA ABB=ON  (79-11-8 OR 112-67-4 OR 112-77-6 OR 515-74-2 OR
                 1080-06-4 OR 128635-03-0 OR 250375-83-8 OR 197014-62-3 OR
                 923-06-8 OR 76652-44-3 OR 182230-28-0)/RN

     FILE 'HCAPLUS' ENTERED AT 14:41:30 ON 28 NOV 2004
L12            0 SEA ABB=ON  L1 AND L11
L13        12395 SEA ABB=ON  L11
L14           16 SEA ABB=ON  L13 AND ?FIBROS?
L15            6 SEA ABB=ON  L14 AND (PD<19990720 OR PRD<19990720)
                 DELETE SELECT
                 SELECT RN L15 1-6
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L16           4 SEA ABB=ON  L15 AND (?TREAT? OR ?PREVENT? OR ?CONTROL? OR
                ?MITIGATE? OR ?DETER? OR ?THERAP?)
L17           0 SEA ABB=ON  L16 AND (?CMDS? OR ?CARBOXYMETHYL?(W)?DEXTRAN?(W)?S
                ULFAT? OR ?CMDBS?)
L18           0 SEA ABB=ON  L14 AND (?CMDS? OR ?CARBOXYMETHYL?(W)?DEXTRAN?(W)?S
                ULFAT? OR ?CMDBS?)

    FILE 'HCAPLUS' ENTERED AT 14:47:30 ON 28 NOV 2004
L19           6 SEA ABB=ON  L15 OR L16
L20           0 SEA ABB=ON  L15 AND ?POLYMER?
L21           1 SEA ABB=ON  L14 AND ?POLYMER?
L22      208993 SEA ABB=ON  (?FIBROS? OR ?FIBER?) AND (?THERAP? OR ?TREAT? OR
                ?PREVENT? OR ?CONTROL? OR ?MITIGAT? OR ?LESSEN?)
L23       55911 SEA ABB=ON  L22 AND ?POLYMER?
L24           0 SEA ABB=ON  L23 AND (?CMDS? OR ?CMDBS?)
L25           0 SEA ABB=ON  L23 AND (?CARBOXYMETHYL?(W)?DEXTRAN?(W)?SULFAT?)
L26       18953 SEA ABB=ON  L23 AND (?NUCLEOTID? OR ?POLYESTER? OR ?POLYAMIN?
                OR ?ENZYM?)
L27       18319 SEA ABB=ON  L23 AND (?NUCLEOTID? OR ?POLYESTER? OR ?POLYAMIN?)
L28          72 SEA ABB=ON  L27 AND (?MONOMER? AND ?CARBOXYL? AND ?SULF?)
L29          56 SEA ABB=ON  L28 AND (PD<19990720 OR PRD<19990720)
L30           0 SEA ABB=ON  L29 AND ?FIBROS?
L31       10210 SEA ABB=ON  (?FIBROS? OR ?MUSCLE? OR ?MESENCHYM? OR ?MESODERM?)
                 AND (?POLYMER?)
L32       10210 SEA ABB=ON  L31 AND ?POLYMER?
L33        4432 SEA ABB=ON  L32 AND (?THERAP? OR ?TREAT? OR ?CONTROL? OR
                ?HEAL? OR ?PREVENT?)
L34           3 SEA ABB=ON  L33 AND (?MONOMER? AND ?CARBOXYL? AND ?SULF?)

    FILE 'REGISTRY' ENTERED AT 14:59:32 ON 28 NOV 2004
L35          70 SEA ABB=ON  (10102-43-9/BI OR 107-92-6/BI OR 110-15-6/BI OR
                110-94-1/BI OR 143-07-7/BI OR 1510-21-0/BI OR 169799-18-2/BI
                OR 169799-44-4/BI OR 24967-93-9/BI OR 24967-94-0/BI OR
                25322-46-7/BI OR 25322-68-3/BI OR 363-24-6/BI OR 50-78-2/BI OR
                51-61-6/BI OR 54397-85-2/BI OR 56-40-6/BI OR 56-81-5/BI OR
                64-19-7/BI OR 69-72-7/BI OR 69-79-4/BI OR 70608-72-9/BI OR
                81-25-4/BI OR 9001-84-7/BI OR 9004-32-4/BI OR 9004-54-0/BI OR
                9004-61-9/BI OR 9005-27-0/BI OR 9005-32-7/BI OR 9005-49-6/BI
                OR 9007-27-6/BI OR 9050-30-0/BI OR 9056-36-4/BI OR 96-82-2/BI
                OR 11121-48-5/BI OR 12777-77-4/BI OR 129-46-4/BI OR 14855-76-6/
                BI OR 16423-68-0/BI OR 17372-87-1/BI OR 20255-95-2/BI OR
                2217-44-9/BI OR 2353-45-9/BI OR 2390-59-2/BI OR 28983-56-4/BI
                OR 314-13-6/BI OR 3244-88-0/BI OR 3861-73-2/BI OR 4712-70-3/BI
                OR 477-73-6/BI OR 53-86-1/BI OR 548-24-3/BI OR 548-62-9/BI OR
                5681-36-7/BI OR 569-58-4/BI OR 569-64-2/BI OR 574-64-1/BI OR
                6035-94-5/BI OR 61489-48-3/BI OR 632-99-5/BI OR 633-03-4/BI OR
                71-67-0/BI OR 72-57-1/BI OR 78642-64-5/BI OR 8004-87-3/BI OR
                89800-66-8/BI OR 9001-54-1/BI OR 9004-02-8/BI OR 9007-28-7/BI
                OR 9013-93-8/BI)

    FILE 'HCAPLUS' ENTERED AT 14:59:43 ON 28 NOV 2004
L36           3 SEA ABB=ON  L34 AND L35
                D IBIB ABS HITSTR L36 1-3

    FILE 'MEDLINE, BIOSIS, EMBASE, WPIDS, JICST-EPLUS, JAPIO' ENTERED AT
    15:00:35 ON 28 NOV 2004
L37           0 SEA ABB=ON  L36

    FILE 'HCAPLUS' ENTERED AT 15:37:43 ON 28 NOV 2004
L38           1 SEA ABB=ON  L16 AND L35
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3 citations using broad search terms from claims — all one ref.

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     FILE 'REGISTRY' ENTERED AT 15:39:42 ON 28 NOV 2004
L39          59 SEA ABB=ON  (112-67-4/BI OR 147-85-3/BI OR 2238-89-3/BI OR
                2238-90-6/BI OR 238429-56-6/BI OR 34324-89-5/BI OR 54947-67-0/B
                I OR 5966-29-0/BI OR 764-22-7/BI OR 10160-28-8/BI OR 102308-32-
                7/BI OR 105-36-2/BI OR 105561-73-7/BI OR 107-73-3/BI OR
                1071-23-4/BI OR 107432-37-1/BI OR 107432-38-2/BI OR 107432-39-3
                /BI OR 107432-40-6/BI OR 107432-41-7/BI OR 107432-42-8/BI OR
                108-24-7/BI OR 108-91-8/BI OR 108149-60-6/BI OR 110-15-6/BI OR
                110-94-1/BI OR 111-76-2/BI OR 112-53-8/BI OR 112-77-6/BI OR
                115464-01-2/BI OR 116355-83-0/BI OR 119837-81-9/BI OR 119837-87
                -5/BI OR 125348-17-6/BI OR 127978-84-1/BI OR 128098-41-9/BI OR
                131606-77-4/BI OR 132260-32-3/BI OR 13360-52-6/BI OR 14131-68-1
                /BI OR 141436-78-4/BI OR 143-15-7/BI OR 145040-09-1/BI OR
                146536-00-7/BI OR 146536-01-8/BI OR 146536-02-9/BI OR 146536-03
                -0/BI OR 146536-04-1/BI OR 146536-05-2/BI OR 146536-06-3/BI OR
                146536-07-4/BI OR 146536-08-5/BI OR 146536-09-6/BI OR 146536-10
                -9/BI OR 146536-11-0/BI OR 146536-12-1/BI OR 146536-13-2/BI OR
                146536-14-3/BI OR 146536-15-4/BI)

     FILE 'HCAPLUS' ENTERED AT 15:40:03 ON 28 NOV 2004
L40           3 SEA ABB=ON  L16 AND L39
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3 ~~Compds~~ cites using applicant's compound RN's in a search - see d gue stat

Inventor Search

=> d l10 4 ibib abs ind hitstr

L10 ANSWER 4 OF 8 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2000:84864 HCAPLUS
DOCUMENT NUMBER: 132:137864
TITLE: Biocompatible **polymers**, **preparation** method and compositions containing same
INVENTOR(S): **Barritault, Denis**; **Caruelle, Jean-pierre**
PATENT ASSIGNEE(S): Fr.
SOURCE: PCT Int. Appl., 127 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000005270	A1	20000203	WO 1999-FR1774	19990720
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
FR 2781485	A1	20000128	FR 1998-9309	19980721
FR 2781485	B1	20030808		
CA 2337328	AA	20000203	CA 1999-2337328	19990720
AU 9949136	A1	20000214	AU 1999-49136	19990720
EP 1117695	A1	20010725	EP 1999-932921	19990720
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002521503	T2	20020716	JP 2000-561226	19990720
US 2001021758	A1	20010913	US 2001-765788	20010119
US 6689741	B2	20040210		
US 2004131583	A1	20040708	US 2003-695574	20031028

PRIORITY APPLN. INFO.:

FR 1998-9309	A	19980721
WO 1999-FR1774	W	19990720
US 2001-765788	A3	20010119

AB The invention concerns a biocompatible **polymer**, useful in pharmaceutical and diagnostic compns., consisting of a sequence of identical or different units: AaXxYy, wherein A represents a monomer unit selected from carbohydrates, esters, alcs., acids, amines, and nucleotides; X represents a carboxyl group fixed on A; Y represents a sulfate or sulfonate group fixed on A; a represents the number of A; x represents the substitution degree by the groups X; y represents the substitution degree by the groups Y. A typical **polymer** was manufactured by **polymerization** of benzyl malolactonate 24.2, allyl malolactonate 9.3, and 2-Bu malolactonate in the presence of tetraethylammonium benzoate at 37° under N, epoxidn. of the allyl groups on the product with m-chloroperbenzoic acid, hydrogenation of epoxidn. product to remove the benzyl groups, and sulfonation of epoxide groups of the resulting acidic **polymer** with Na2S2O5.

IC ICM C08B037-02
ICS C08G063-91; A61K031-715; A61K031-795
CC 35-8 (Chemistry of Synthetic High Polymers)

Section cross-reference(s): 44, 63

ST biocompatible **polymer** carboxy sulfo manuf; nucleotide carboxy sulfo biocompatible manuf; **polymeric** polyol carboxy sulfo biocompatible manuf; polyamine carboxy sulfo biocompatible manuf; polyester carboxy sulfo biocompatible manuf; polysaccharide carboxy sulfo biocompatible; diagnostic compn carboxy sulfo **polymer**; pharmaceutical compn carboxy sulfo **polymer**

IT Diagnosis
Regeneration, animal
(agents; biocompatible **polymers** having carboxy and sulfo groups)

IT Anti-inflammatory agents
Antibiotics
Anticoagulants
Antimicrobial agents
(biocompatible **polymers** having carboxy and sulfo groups)

IT Nucleotides, **preparation**
Polyamines
Polyesters, **preparation**
Polysaccharides, **preparation**
RL: IMF (Industrial manufacture); PREP (Preparation)
(biocompatible **polymers** having carboxy and sulfo groups)

IT Growth factors, animal
RL: MSC (Miscellaneous)
(biocompatible **polymers** having carboxy and sulfo groups)

IT Enzymes, **preparation**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); IMF (Industrial manufacture); BIOL (Biological study); PREP (Preparation)
(synthetic; biocompatible **polymers** having carboxy and sulfo groups)

IT **79-11-8DP**, Chloroacetic acid, reaction products with dextran, sulfated **112-67-4DP**, Palmitoyl chloride, reaction products with dextran, sulfated **112-77-6DP**, Oleyl chloride, reaction products with dextran, sulfated **515-74-2DP**, Sodium sulfanilate, reaction products with dextran, sulfated **1080-06-4DP**, Tyrosine methyl ester, reaction products with dextran, sulfated **2577-90-4DP**, reaction products with dextran, sulfated **128635-03-0DP**, Dextran T40, carboxymethylated sulfated **250375-83-8DP**, epoxidized, hydrolyzed, sulfonated
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); IMF (Industrial manufacture); BIOL (Biological study); PREP (Preparation)
(biocompatible **polymers** having carboxy and sulfo groups)

IT **197014-62-3P**
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(biocompatible **polymers** having carboxy and sulfo groups)

IT **923-06-8P**, 2-Bromosuccinic acid **5470-44-0P**, Bromosuccinic anhydride **250375-87-2P 250375-90-7P**
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(monomer precursor; biocompatible **polymers** having carboxy and sulfo groups)

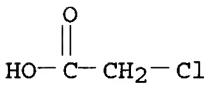
IT **78-92-2**, 2-Butanol **100-51-6**, Benzyl alcohol, reactions **107-18-6**, Allyl alcohol, reactions **617-45-8**, Aspartic acid
RL: RCT (Reactant); RACT (Reactant or reagent)
(monomer precursor; biocompatible **polymers** having carboxy and sulfo groups)

IT **76652-44-3P 182230-28-0P 250375-82-7P**
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(monomer; biocompatible **polymers** having carboxy and sulfo groups)

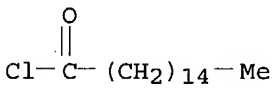
IT **250375-83-8P**
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(precursor; biocompatible **polymers** having carboxy and sulfo groups)

IT **79-11-8DP**, Chloroacetic acid, reaction products with dextran, sulfated **112-67-4DP**, Palmitoyl chloride, reaction products with dextran, sulfated **112-77-6DP**, Oleyl chloride, reaction products with dextran, sulfated **515-74-2DP**, Sodium sulfanilate, reaction products with dextran, sulfated **1080-06-4DP**, Tyrosine methyl ester, reaction products with dextran, sulfated **2577-90-4DP**, reaction products with dextran, sulfated **128635-03-0DP**, Dextran T40, carboxymethylated sulfated **250375-83-8DP**, epoxidized, hydrolyzed, sulfonated
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); IMF (Industrial manufacture); BIOL (Biological study); PREP (Preparation)
(biocompatible **polymers** having carboxy and sulfo groups)

RN 79-11-8 HCAPLUS
CN Acetic acid, chloro- (8CI, 9CI) (CA INDEX NAME)

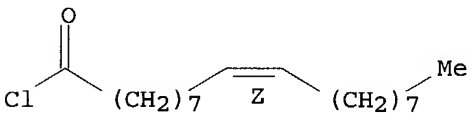


RN 112-67-4 HCAPLUS
CN Hexadecanoyl chloride (9CI) (CA INDEX NAME)

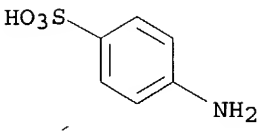


RN 112-77-6 HCAPLUS
CN 9-Octadecenoyl chloride, (9Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



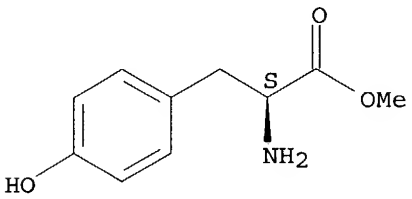
RN 515-74-2 HCAPLUS
CN Benzenesulfonic acid, 4-amino-, monosodium salt (9CI) (CA INDEX NAME)



● Na

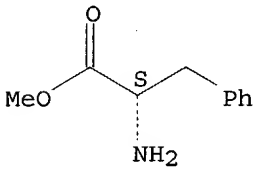
RN 1080-06-4 HCAPLUS
CN L-Tyrosine, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



RN 2577-90-4 HCAPLUS
CN L-Phenylalanine, methyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

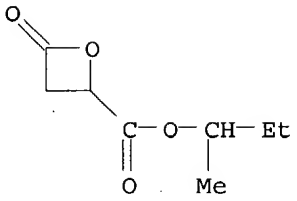


RN 128635-03-0 HCAPLUS
CN Dextran T 40 (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
→ RN 250375-83-8 HCAPLUS
CN 2-Oxetanecarboxylic acid, 4-oxo-, 1-methylpropyl ester, polymer with phenylmethyl 4-oxo-2-oxetanecarboxylate and 2-propenyl 4-oxo-2-oxetanecarboxylate (9CI) (CA INDEX NAME)

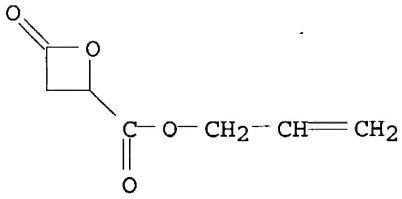
CM 1

CRN 250375-82-7
CMF C8 H12 O4



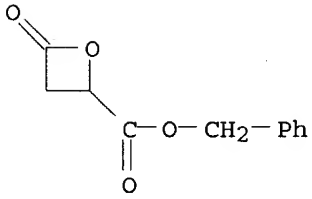
CM 2

CRN 182230-28-0
CMF C7 H8 O4

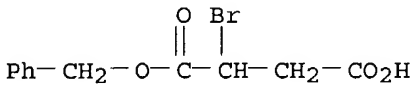


CM 3

CRN 76652-44-3
CMF C11 H10 O4

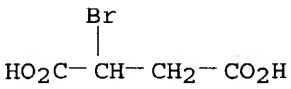


IT **197014-62-3P**
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(biocompatible **polymers** having carboxy and sulfo groups)
RN 197014-62-3 HCAPLUS
CN Butanedioic acid, bromo-, 1-(phenylmethyl) ester (9CI) (CA INDEX NAME)

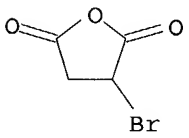


IT **923-06-8P**, 2-Bromosuccinic acid **5470-44-0P**, Bromosuccinic anhydride **250375-87-2P 250375-90-7P**
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(monomer precursor; biocompatible **polymers** having carboxy and

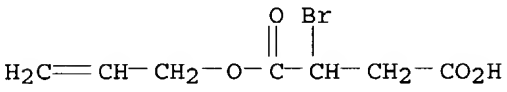
sulfo groups)
RN 923-06-8 HCAPLUS
CN Butanedioic acid, bromo- (9CI) (CA INDEX NAME)



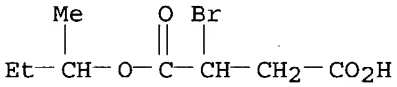
RN 5470-44-0 HCAPLUS
CN 2,5-Furandione, 3-bromodihydro- (9CI) (CA INDEX NAME)



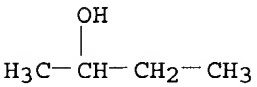
RN 250375-87-2 HCAPLUS
CN Butanedioic acid, bromo-, 1-(2-propenyl) ester (9CI) (CA INDEX NAME)



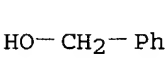
RN 250375-90-7 HCAPLUS
CN Butanedioic acid, bromo-, 1-(1-methylpropyl) ester (9CI) (CA INDEX NAME)



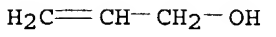
IT **78-92-2**, 2-Butanol **100-51-6**, Benzyl alcohol, reactions
107-18-6, Allyl alcohol, reactions **617-45-8**, Aspartic acid
RL: RCT (Reactant); RACT (Reactant or reagent)
(monomer precursor; biocompatible **polymers** having carboxy and sulfo groups)
RN 78-92-2 HCAPLUS
CN 2-Butanol (9CI) (CA INDEX NAME)



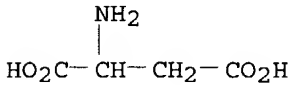
RN 100-51-6 HCAPLUS
CN Benzenemethanol (9CI) (CA INDEX NAME)



RN 107-18-6 HCAPLUS
CN 2-Propen-1-ol (9CI) (CA INDEX NAME)

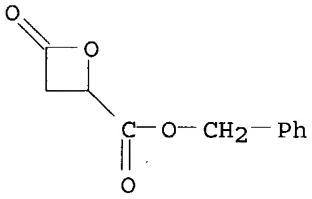


RN 617-45-8 HCAPLUS
CN Aspartic acid (9CI) (CA INDEX NAME)

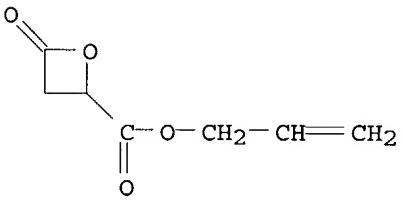


IT **76652-44-3P 182230-28-0P 250375-82-7P**
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(monomer; biocompatible **polymers** having carboxy and sulfo groups)

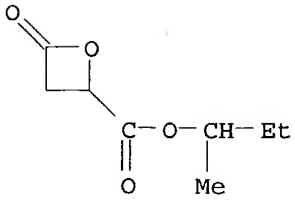
RN 76652-44-3 HCAPLUS
CN 2-Oxetanecarboxylic acid, 4-oxo-, phenylmethyl ester (9CI) (CA INDEX NAME)



RN 182230-28-0 HCAPLUS
CN 2-Oxetanecarboxylic acid, 4-oxo-, 2-propenyl ester (9CI) (CA INDEX NAME)



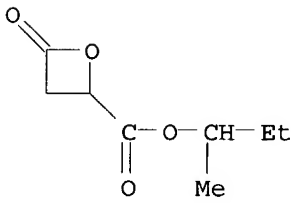
RN 250375-82-7 HCAPLUS
CN 2-Oxetanecarboxylic acid, 4-oxo-, 1-methylpropyl ester (9CI) (CA INDEX NAME)



IT **250375-83-8P**
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)
(precursor; biocompatible **polymers** having carboxy and sulfo groups)
RN 250375-83-8 HCAPLUS
CN 2-Oxetanecarboxylic acid, 4-oxo-, 1-methylpropyl ester, polymer with phenylmethyl 4-oxo-2-oxetanecarboxylate and 2-propenyl 4-oxo-2-oxetanecarboxylate (9CI) (CA INDEX NAME)

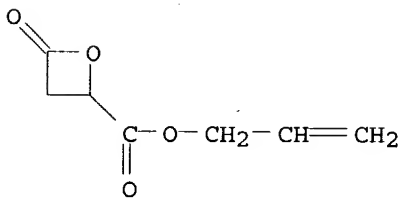
CM 1

CRN 250375-82-7
CMF C8 H12 O4



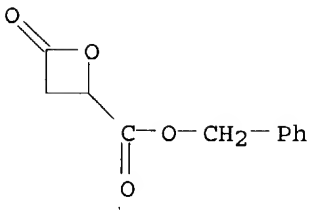
CM 2

CRN 182230-28-0
CMF C7 H8 O4



CM 3

CRN 76652-44-3
CMF C11 H10 O4



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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                 OR ?MESODERM?) AND (?POLYMER?)
L32        10210 SEA FILE=HCAPLUS ABB=ON  L31 AND ?POLYMER?
L33         4432 SEA FILE=HCAPLUS ABB=ON  L32 AND (?THERAP? OR ?TREAT? OR
                 ?CONTROL? OR ?HEAL? OR ?PREVENT?)
L34            3 SEA FILE=HCAPLUS ABB=ON  L33 AND (?MONOMER? AND ?CARBOXYL? AND
                 ?SULF?)
L35           70 SEA FILE=REGISTRY ABB=ON  (10102-43-9/BI OR 107-92-6/BI OR
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                 169799-18-2/BI OR 169799-44-4/BI OR 24967-93-9/BI OR 24967-94-0
                 /BI OR 25322-46-7/BI OR 25322-68-3/BI OR 363-24-6/BI OR
                 50-78-2/BI OR 51-61-6/BI OR 54397-85-2/BI OR 56-40-6/BI OR
                 56-81-5/BI OR 64-19-7/BI OR 69-72-7/BI OR 69-79-4/BI OR
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                 OR 9005-49-6/BI OR 9007-27-6/BI OR 9050-30-0/BI OR 9056-36-4/BI
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                 OR 633-03-4/BI OR 71-67-0/BI OR 72-57-1/BI OR 78642-64-5/BI OR
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                 OR 9007-28-7/BI OR 9013-93-8/BI)
L36            3 SEA FILE=HCAPLUS ABB=ON  L34 AND L35
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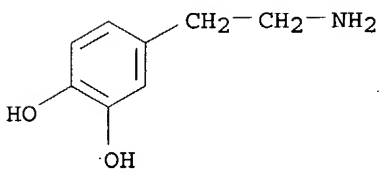
L36 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2004:372844 HCAPLUS
DOCUMENT NUMBER: 140:368742
TITLE: Use of lipid conjugates in the **treatment** of disease
INVENTOR(S): Yedgar, Saul; Krimsky, Miron; Beck, Grietje; Yard, Benito Antonio; Van Der Woude, Fokko Johannes
PATENT ASSIGNEE(S): Israel
SOURCE: U.S. Pat. Appl. Publ., 103 pp., Cont.-in-part of U.S. Ser. No. 756,765.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2004087492	A1	20040506	US 2003-627981		20030728
US 2002049183	A1	20020425	US 2001-756765		20010110
PRIORITY APPLN. INFO.:			US 2000-174907P	P	20000110
			US 2001-756765	A2	20010110
			US 2000-174905P	P	20000110

AB The invention provides novel methods for **treating** disease based upon the medicinal use of lipids and phospholipids covalently bound to physiol. acceptable **monomers** or **polymers.** Phosphatidylethanolamine moieties conjugated to physiol. acceptable **monomers** and **polymers** (PE conjugates) manifest an unexpectedly wide range of pharmacol. effects, including stabilizing cell membranes; limiting oxidative damage to cell and blood components; limiting cell proliferation, cell extravasation and (tumor) cell migratory behavior; suppressing immune responses; and attenuating physiol. reactions to stress, as expressed in elevated chemokine levels. The surprisingly manifold pharmacol. properties of the phospholipid-conjugates allow for the invention, disclosed herein, of novel methods for the **treatment** of a diverse range of disease states, including obstructive respiratory disease, including asthma; colitis and Crohn's disease; central nervous system insult, including blood brain barrier compromise, ischemic stroke, and multiple sclerosis; contact dermatitis; psoriasis; cardiovascular disease, including ischemic conditions and prophylaxis for invasive vascular procedures; cellular proliferative disorders, including anti-tumor vasculogenesis, invasiveness, and metastases; anti-oxidant **therapy**; hemolytic syndromes; sepsis; acute respiratory distress syndrome; tissue transplant rejection syndromes; autoimmune disease; viral infection; and hypersensitivity conjunctivitis. The **therapeutic** methods of the invention include administration of phosphatidylethanolamine bound to CM-cellulose, heparin, hyaluronic acid, polyethylene glycol, and Polygeline (haemaccel). Disclosed herein are also new compds. comprised of phospholipid moieties bound to low mol. weight **monomers** and dimers, including mono- and disaccharides, **carboxylated** disaccharides, mono- and **dicarboxylic** acids, salicylates, bile acids, and fatty acids.

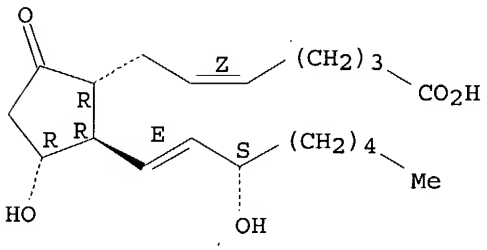
IT **51-61-6**, Dopamine, biological studies **363-24-6**, PGE2 **10102-43-9**, Nitric oxide, biological studies **54397-85-2**, TXB2 **70608-72-9**, 5-HETE
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(lipid conjugates for disease **treatment**)
RN 51-61-6 HCAPLUS

CN 1,2-Benzenediol, 4-(2-aminoethyl)- (9CI) (CA INDEX NAME)



RN 363-24-6 HCAPLUS
CN Prosta-5,13-dien-1-oic acid, 11,15-dihydroxy-9-oxo-, (5Z,11α,13E,15S)- (9CI) (CA INDEX NAME)

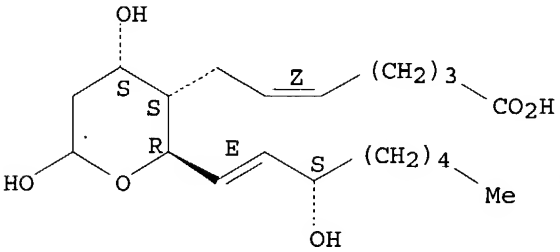
Absolute stereochemistry.
Double bond geometry as shown.



RN 10102-43-9 HCAPLUS
CN Nitrogen oxide (NO) (8CI, 9CI) (CA INDEX NAME)

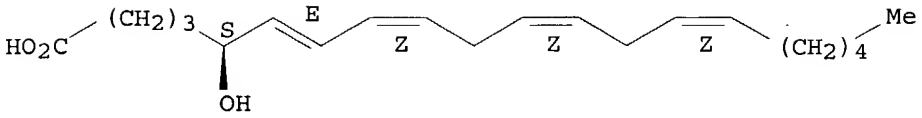
RN 54397-85-2 HCAPLUS
CN 5-Heptenoic acid, 7-[(2R,3S,4S)-tetrahydro-4,6-dihydroxy-2-[(1E,3S)-3-hydroxy-1-octenyl]-2H-pyran-3-yl]-, (5Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



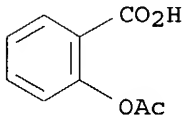
RN 70608-72-9 HCAPLUS
CN 6,8,11,14-Eicosatetraenoic acid, 5-hydroxy-, (5S,6E,8Z,11Z,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

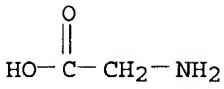


IT **50-78-2D**, Aspirin, conjugates with (phospho)lipids
56-40-6D, Glycine, conjugates with (phospho)lipids
56-81-5D, Glycerol, acyl derivs., conjugates **64-19-7D**, Acetic acid, conjugates with (phospho)lipids **69-72-7D**, Salicylic acid, and salicylates, conjugates with (phospho)lipids, biological studies **69-79-4D**, Maltose, conjugates with (phospho)lipids **81-25-4D**, Cholic acid, conjugates with (phospho)lipids **96-82-2D**, Lactobionic acid, conjugates with (phospho)lipids **107-92-6D**, Butyric acid, conjugates with (phospho)lipids **110-15-6D**, Succinic acid, conjugates with (phospho)lipids **110-94-1D**, Glutaric acid, conjugates with (phospho)lipids **143-07-7D**, Dodecanoic acid, conjugates with (phospho)lipids **1510-21-0D**, Cholesteryl hemisuccinate, conjugates with (phospho)lipids **5681-36-7D**, Dipalmitoylphosphatidylethanolamine, conjugates with hyaluronic acid **9004-32-4D**, Carboxymethylcellulose, conjugates with (phospho)lipids **9004-54-0D**, Dextran, and fragments, conjugates with (phospho)lipids, biological studies **9004-61-9D**, Hyaluronic acid, and fragments, conjugates with (phospho)lipids **9005-27-0D**, Hydroxyethyl starch, conjugates with (phospho)lipids **9005-32-7D**, Alginic acid, conjugates with (phospho)lipids **9005-49-6D**, Heparin, and fragments, conjugates with (phospho)lipids, biological studies **9007-27-6D**, Chondroitin, fragments, conjugates with (phospho)lipids **9007-28-7D**, Chondroitin **sulfate**, fragments, conjugates with (phospho)lipids **9050-30-0D**, Heparan **sulfate**, and fragments, conjugates with (phospho)lipids **9056-36-4D**, Keratan **sulfate**, fragments, conjugates with (phospho)lipids **20255-95-2D**, Dimyristoylphosphatidylethanolamine, conjugates with hyaluronic acid **24967-93-9D**, Chondroitin-4-**sulfate**, and fragments, conjugates with (phospho)lipids **24967-94-0D**, Dermatan **sulfate**, and fragments, conjugates with (phospho)lipids **25322-46-7D**, Chondroitin-6-**sulfate**, and fragments, conjugates with (phospho)lipids **25322-68-3D**, Polyethylene glycol, and **polycarboxylated** PEG, conjugates with (phospho)lipids **169799-18-2D**, Dermatin (polysaccharide), and fragments, conjugates with (phospho)lipids **169799-44-4D**, Keratin **sulfate**, conjugates with (phospho)lipids
RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(lipid conjugates for disease **treatment**)

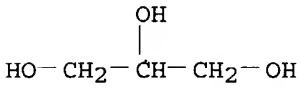
RN 50-78-2 HCAPLUS
CN Benzoic acid, 2-(acetyloxy)- (9CI) (CA INDEX NAME)



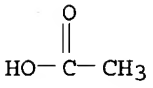
RN 56-40-6 HCAPLUS
CN Glycine (8CI, 9CI) (CA INDEX NAME)



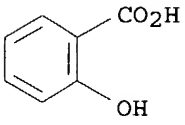
RN 56-81-5 HCAPLUS
CN 1,2,3-Propanetriol (9CI) (CA INDEX NAME)



RN 64-19-7 HCAPLUS
CN Acetic acid (7CI, 8CI, 9CI) (CA INDEX NAME)

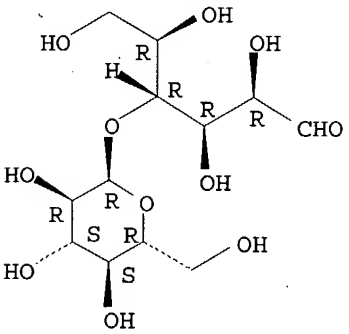


RN 69-72-7 HCAPLUS
CN Benzoic acid, 2-hydroxy- (9CI) (CA INDEX NAME)



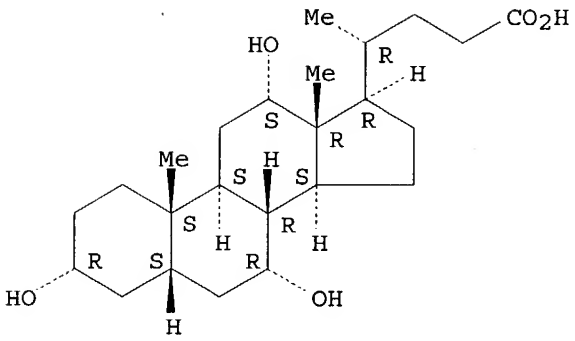
RN 69-79-4 HCAPLUS
CN D-Glucose, 4-O-α-D-glucopyranosyl- (6CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.



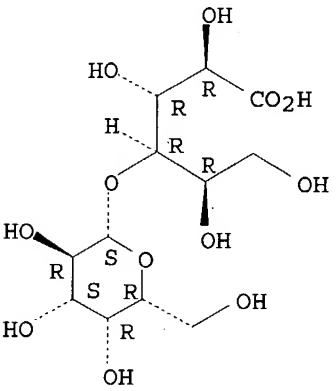
RN 81-25-4 HCAPLUS
CN Cholan-24-oic acid, 3,7,12-trihydroxy-, (3α,5β,7α,12.alpha.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

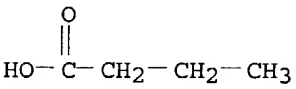


RN 96-82-2 HCAPLUS
CN D-Gluconic acid, 4-O-β-D-galactopyranosyl- (9CI) (CA INDEX NAME)

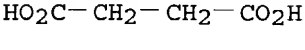
Absolute stereochemistry.



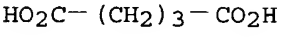
RN 107-92-6 HCAPLUS
CN Butanoic acid (9CI) (CA INDEX NAME)



RN 110-15-6 HCAPLUS
CN Butanedioic acid (9CI) (CA INDEX NAME)

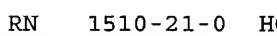


RN 110-94-1 HCAPLUS
CN Pentanedioic acid (9CI) (CA INDEX NAME)



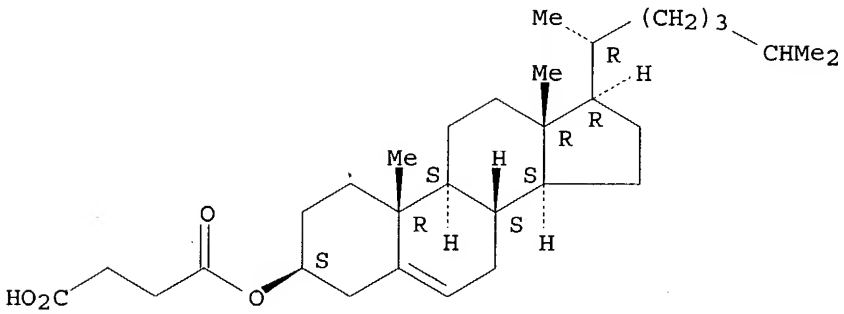
RN 143-07-7 HCAPLUS

CN Dodecanoic acid (9CI) (CA INDEX NAME)

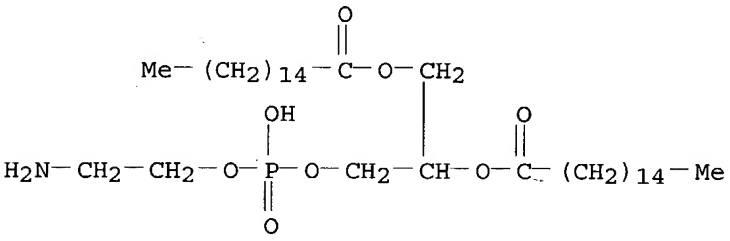


RN 1510-21-0 HCAPLUS
CN Cholest-5-en-3-ol (3β)-, hydrogen butanedioate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 5681-36-7 HCAPLUS
CN Hexadecanoic acid, 1-[[[(2-aminoethoxy)hydroxyphosphinyl]oxy]methyl]-1,2-ethanediyl ester (9CI) (CA INDEX NAME)



RN 9004-32-4 HCAPLUS
CN Cellulose, carboxymethyl ether, sodium salt (8CI, 9CI) (CA INDEX NAME)

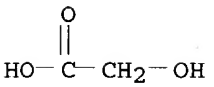
CM 1

CRN 9004-34-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 79-14-1
CMF C2 H4 O3



RN 9004-54-0 HCAPLUS
CN Dextran (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 9004-61-9 HCAPLUS
CN Hyaluronic acid (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 9005-27-0 HCAPLUS
CN Starch, 2-hydroxyethyl ether (8CI, 9CI) (CA INDEX NAME)

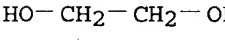
CM 1

CRN 9005-25-8
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 107-21-1
CMF C2 H6 O2



RN 9005-32-7 HCAPLUS
CN Alginic acid (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 9005-49-6 HCAPLUS
CN Heparin (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 9007-27-6 HCAPLUS
CN Chondroitin (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 9007-28-7 HCAPLUS
CN Chondroitin, hydrogen sulfate (9CI) (CA INDEX NAME)

CM 1

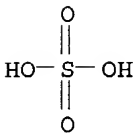
CRN 9007-27-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 7664-93-9

CMF H2 O4 S



RN 9050-30-0 HCAPLUS
CN Heparan, sulfate (9CI) (CA INDEX NAME)

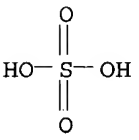
CM 1

CRN 70226-44-7
CMF Unspecified
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

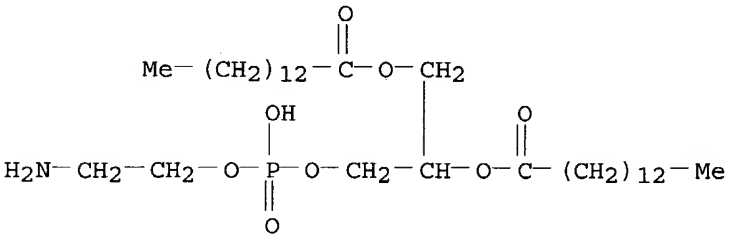
CM 2

CRN 7664-93-9
CMF H2 O4 S



RN 9056-36-4 HCAPLUS
CN Keratosulfate (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 20255-95-2 HCAPLUS
CN Tetradecanoic acid, 1-[[[(2-aminoethoxy)hydroxyphosphinyl]oxy]methyl]-1,2-ethanediyl ester (9CI) (CA INDEX NAME)



RN 24967-93-9 HCAPLUS
CN Chondroitin, 4-(hydrogen sulfate) (9CI) (CA INDEX NAME)

CM 1

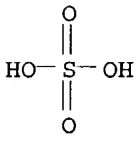
CRN 9007-27-6

CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 7664-93-9
CMF H2 O4 S



RN 24967-94-0 HCAPLUS
CN Dermatan, hydrogen sulfate (ester) (9CI) (CA INDEX NAME)

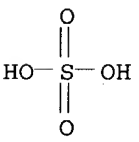
CM 1

CRN 75634-40-1
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 7664-93-9
CMF H2 O4 S



RN 25322-46-7 HCAPLUS
CN Chondroitin, 6-(hydrogen sulfate) (9CI) (CA INDEX NAME)

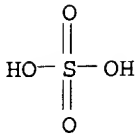
CM 1

CRN 9007-27-6
CMF Unspecified
CCI PMS, MAN

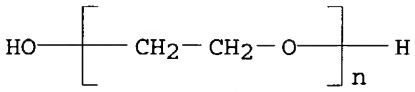
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 7664-93-9
CMF H2 O4 S



RN 25322-68-3 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-hydro-ω-hydroxy- (9CI) (CA INDEX NAME)



RN 169799-18-2 HCAPLUS
CN Dermatin (polysaccharide) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 169799-44-4 HCAPLUS
CN Keratin (polysaccharide) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
IT **9001-84-7**, Phospholipase A2
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(soluble; lipid conjugates for disease **treatment**)
RN 9001-84-7 HCAPLUS
CN Phospholipase A2 (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L36 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:525878 HCAPLUS
DOCUMENT NUMBER: 135:102584
TITLE: Use of lipid conjugates in the **treatment** of disease
INVENTOR(S): Yedgar, Saul; Shuseyov, David; Golomb, Gershon; Reich, Reuven; Ginsburg, Isaac; Higazi, Abd-Al-Roof; Ligumski, Moshe; Krimsky, Miron; Ojcius, David; Yard, Benito Antonio; Van der Woude, Fokko Johannes; Schnitzer, Edit; et al.
PATENT ASSIGNEE(S): Yissum Research Development Company of the Hebrew University of Jerusalem, Israel
SOURCE: PCT Int. Appl., 146 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001051003	A2	20010719	WO 2001-IL23	20010110
WO 2001051003	A3	20040826		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,

LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN,
YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

CA 2397016	AA	20010719	CA 2001-2397016	20010110
AU 2001023935	A5	20010724	AU 2001-23935	20010110
EP 1471870	A2	20041103	EP 2001-900237	20010110

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
IE, FI, CY, TR

PRIORITY APPLN. INFO.:	US 2000-174905P	P	20000110
	US 2000-174907P	P	20000110
	WO 2001-IL23	W	20010110

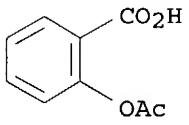
OTHER SOURCE(S): MARPAT 135:102584

AB Methods are provided for **treating** disease based upon the medicinal use of lipids and phospholipids covalently bonded to physiol. acceptable **monomers** or **polymers.** Phosphatidylethanolamine moieties conjugated to physiol. acceptable **monomers** and **polymers** (PE conjugates) manifest an unexpectedly wide range of pharmacol. effects, including stabilizing cell membranes; limiting oxidative damage to cell and blood components; limiting cell proliferation, cell extravasation and(tumor) cell migratory behavior; suppressing immune responses; and attenuating physiol. reactions to stress, as expressed in elevated chemokine levels. The surprisingly manifold pharmacol. properties of the PL-conjugates allow for the invention of methods for the **treatment** of a diverse range of disease states, including obstructive respiratory disease, including asthma; colitis and Crohn's disease; central nervous system insult, including blood brain barrier compromise, ischemic stroke, and multiple sclerosis; contact dermatitis; psoriasis; cardiovascular disease, including ischemic conditions and prophylaxis for invasive vascular procedures; cellular proliferative disorders, including anti-tumor vasculogenesis, invasiveness, and metastases; anti-oxidant **therapy** ; hemolytic syndromes; sepsis; acute respiratory distress syndrome; tissue transplant rejection syndromes; autoimmune disease; viral infection; and hypersensitivity conjunctivitis. The **therapeutic** methods of the invention include administration of phosphatidylethanolamine bound to CM-cellulose, heparin, hyaluronic acid, polyethylene glycol, and hemaccel. Also disclosed are new compds. comprised of phospholipid moieties bound to low mol. weight **monomers** and dimers, including mono- and disaccharides, **carboxylated** disaccharides, mono- and **dicarboxylic** acids, salicylates, bile acids, and fatty acids.

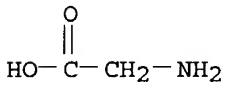
IT **50-78-2D**, Aspirin, conjugates with (phospho)lipids **56-40-6D**, Glycine, conjugates with (phospho)lipids, biological studies **56-81-5D**, Glycerol, acyl derivs., conjugates **64-19-7D**, Acetic acid, conjugates with (phospho)lipids, biological studies **69-72-7D**, Salicylic acid, and salicylates, conjugates with (phospho)lipids, biological studies **69-79-4D**, Maltose, conjugates with (phospho)lipids **81-25-4D**, Cholic acid, conjugates with (phospho)lipids **96-82-2D**, Lactobionic acid, conjugates with (phospho)lipids **107-92-6D**, Butyric acid, conjugates with (phospho)lipids **110-15-6D**, Succinic acid, conjugates with (phospho)lipids **110-94-1D**, Glutaric acid, conjugates with (phospho)lipids **143-07-7D**, Dodecanoic acid, conjugates with (phospho)lipids, biological studies **1510-21-0D**, Cholesteryl hemisuccinate, conjugates with (phospho)lipids **9004-32-4D**, Carboxymethylcellulose, conjugates with (phospho)lipids **9004-54-0D**, Dextran, and fragments, conjugates with (phospho)lipids, biological studies **9004-61-9D**, Hyaluronic

acid, and fragments, conjugates with (phospho)lipids **9005-27-0D**, Hydroxyethyl starch, conjugates with (phospho)lipids **9005-32-7D**, Alginic acid, conjugates with (phospho)lipids **9005-49-6D**, Heparin, and fragments, conjugates with (phospho)lipids, biological studies **9007-27-6D**, Chondroitin, fragments, conjugates with (phospho)lipids **9050-30-0D**, Heparan **sulfate**, and fragments, conjugates with (phospho)lipids **9056-36-4D**, Keratan **sulfate**, fragments, conjugates with (phospho)lipids **24967-93-9D**, Chondroitin-4-**sulfate**, and fragments, conjugates with (phospho)lipids **24967-94-0D**, Dermatan **sulfate**, and fragments, conjugates with (phospho)lipids **25322-46-7D**, Chondroitin-6-**sulfate**, and fragments, conjugates with (phospho)lipids **25322-68-3D**, Polyethylene glycol, and **polycarboxylated** PEG, conjugates with (phospho)lipids **169799-18-2D**, Dermatin (polysaccharide), and fragments, conjugates with (phospho)lipids **169799-44-4D**, Keratin **sulfate**, conjugates with (phospho)lipids
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(lipid conjugates for disease **treatment**)

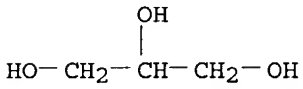
RN 50-78-2 HCAPLUS
CN Benzoic acid, 2-(acetyloxy)- (9CI) (CA INDEX NAME)



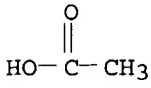
RN 56-40-6 HCAPLUS
CN Glycine (8CI, 9CI) (CA INDEX NAME)



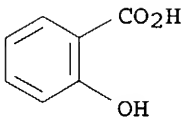
RN 56-81-5 HCAPLUS
CN 1,2,3-Propanetriol (9CI) (CA INDEX NAME)



RN 64-19-7 HCAPLUS
CN Acetic acid (7CI, 8CI, 9CI) (CA INDEX NAME)

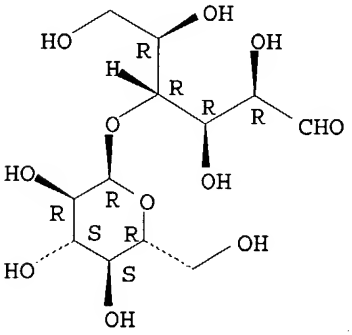


RN 69-72-7 HCAPLUS
CN Benzoic acid, 2-hydroxy- (9CI) (CA INDEX NAME)



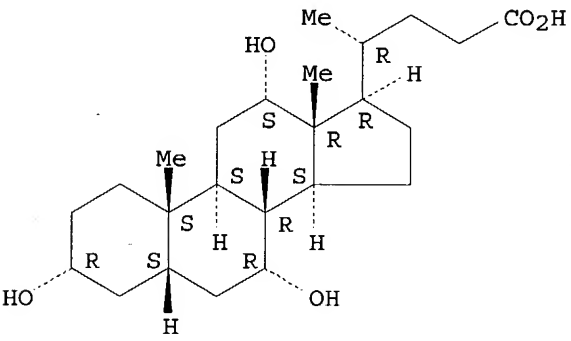
RN 69-79-4 HCAPLUS
CN D-Glucose, 4-O-α-D-glucopyranosyl- (6CI, 9CI) (CA INDEX NAME)

Absolute stereochemistry.



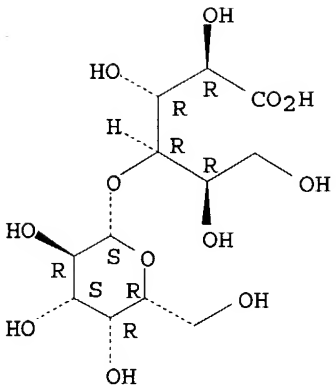
RN 81-25-4 HCAPLUS
CN Cholan-24-oic acid, 3,7,12-trihydroxy-, (3α,5β,7α,12.alph
a.)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

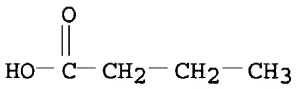


RN 96-82-2 HCAPLUS
CN D-Gluconic acid, 4-O-β-D-galactopyranosyl- (9CI) (CA INDEX NAME)

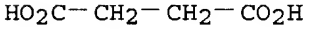
Absolute stereochemistry.



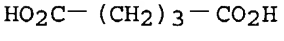
RN 107-92-6 HCAPLUS
CN Butanoic acid (9CI) (CA INDEX NAME)



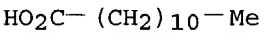
RN 110-15-6 HCAPLUS
CN Butanedioic acid (9CI) (CA INDEX NAME)



RN 110-94-1 HCAPLUS
CN Pentanedioic acid (9CI) (CA INDEX NAME)

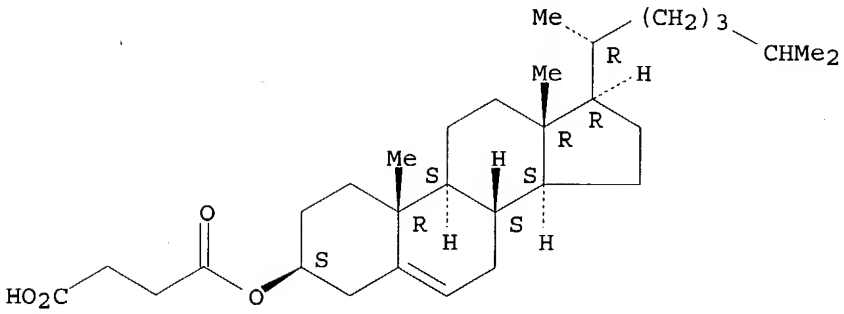


RN 143-07-7 HCAPLUS
CN Dodecanoic acid (9CI) (CA INDEX NAME)



RN 1510-21-0 HCAPLUS
CN Cholest-5-en-3-ol (3β)-, hydrogen butanedioate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 9004-32-4 HCAPLUS
CN Cellulose, carboxymethyl ether, sodium salt (8CI, 9CI) (CA INDEX NAME)

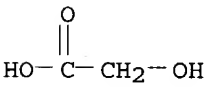
CM 1

CRN 9004-34-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 79-14-1
CMF C2 H4 O3



RN 9004-54-0 HCAPLUS
CN Dextran (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 9004-61-9 HCAPLUS
CN Hyaluronic acid (8CI, 9CI) . (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 9005-27-0 HCAPLUS
CN Starch, 2-hydroxyethyl ether (8CI, 9CI) (CA INDEX NAME)

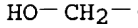
CM 1

CRN 9005-25-8
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 107-21-1
CMF C2 H6 O2



RN 9005-32-7 HCAPLUS
CN Alginic acid (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 9005-49-6 HCAPLUS
CN Heparin (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 9007-27-6 HCAPLUS
CN Chondroitin (8CI, 9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 9050-30-0 HCAPLUS
CN Heparan, sulfate (9CI) (CA INDEX NAME)

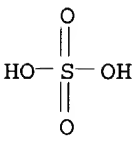
CM 1

CRN 70226-44-7
CMF Unspecified
CCI MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 7664-93-9
CMF H2 O4 S



RN 9056-36-4 HCAPLUS
CN Keratosulfate (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 24967-93-9 HCAPLUS
CN Chondroitin, 4-(hydrogen sulfate) (9CI) (CA INDEX NAME)

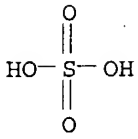
CM 1

CRN 9007-27-6
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 7664-93-9
CMF H2 O4 S



RN 24967-94-0 HCAPLUS
CN Dermatan, hydrogen sulfate (ester) (9CI) (CA INDEX NAME)

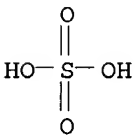
CM 1

CRN 75634-40-1
CMF Unspecified
CCI PMS, MAN

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 7664-93-9
CMF H2 O4 S



RN 25322-46-7 HCAPLUS
CN Chondroitin, 6-(hydrogen sulfate) (9CI) (CA INDEX NAME)

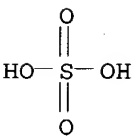
CM 1

CRN 9007-27-6
CMF Unspecified
CCI PMS, MAN

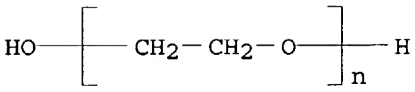
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

CM 2

CRN 7664-93-9
CMF H2 O4 S



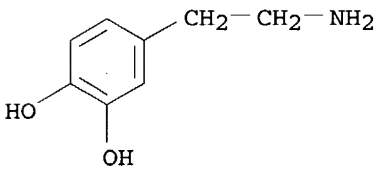
RN 25322-68-3 HCAPLUS
CN Poly(oxy-1,2-ethanediyl), α-hydro-ω-hydroxy- (9CI) (CA INDEX NAME)



RN 169799-18-2 HCAPLUS
CN Dermatin (polysaccharide) (9CI) (CA INDEX NAME)

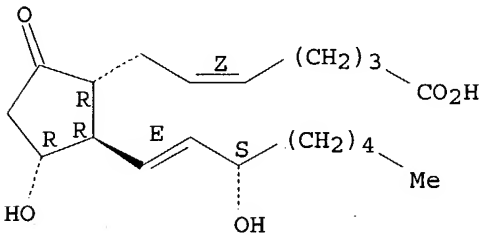
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 169799-44-4 HCAPLUS
CN Keratin (polysaccharide) (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
IT **51-61-6**, Dopamine, biological studies **363-24-6**, PGE2
9001-54-1, Hyaluronidase **9013-93-8**, Phospholipase
10102-43-9, Nitric oxide, biological studies **54397-85-2**,
TXB2 **70608-72-9**, 5-HETE
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(lipid conjugates for disease **treatment**)
RN 51-61-6 HCAPLUS
CN 1,2-Benzenediol, 4-(2-aminoethyl)- (9CI) (CA INDEX NAME)



RN 363-24-6 HCAPLUS
CN Prosta-5,13-dien-1-oic acid, 11,15-dihydroxy-9-oxo-, (5Z,11α,13E,15S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



RN 9001-54-1 HCAPLUS
CN Hyaluronidase (9CI) (CA INDEX NAME)

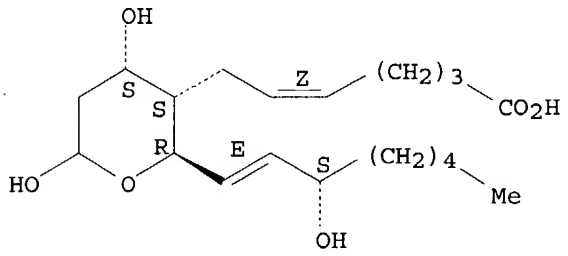
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 9013-93-8 HCAPLUS
CN Phospholipase (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 10102-43-9 HCAPLUS

CN Nitrogen oxide (NO) (8CI, 9CI) (CA INDEX NAME)

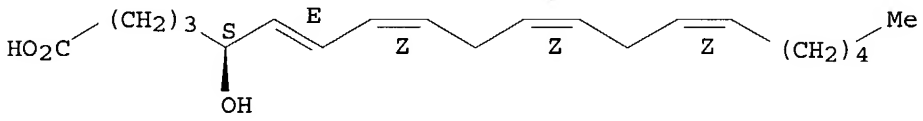
RN 54397-85-2 HCAPLUS
CN 5-Heptenoic acid, 7-[(2R,3S,4S)-tetrahydro-4,6-dihydroxy-2-[(1E,3S)-3-hydroxy-1-octenyl]-2H-pyran-3-yl]-, (5Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.

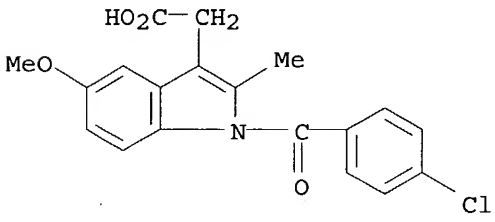


RN 70608-72-9 HCAPLUS
CN 6,8,11,14-Eicosatetraenoic acid, 5-hydroxy-, (5S,6E,8Z,11Z,14Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



IT **53-86-1**, Indomethacin
RL: ADV (Adverse effect, including toxicity); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(small intestine damage from; lipid conjugates for disease **treatment**)
RN 53-86-1 HCAPLUS
CN 1H-Indole-3-acetic acid, 1-(4-chlorobenzoyl)-5-methoxy-2-methyl- (9CI) (CA INDEX NAME)



IT **9001-84-7**, Phospholipase A2
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL

(Biological study); PROC (Process)
(soluble; lipid conjugates for disease **treatment**)
RN 9001-84-7 HCAPLUS
CN Phospholipase A2 (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

L36 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1991:115104 HCAPLUS
DOCUMENT NUMBER: 114:115104
TITLE: Pharmaceutical compositions containing **polymers** of aromatic compounds which affect tissue distribution of bioactive peptides and proteins
INVENTOR(S): Ben-Sasson, Shmuel; Eilat, Dan
PATENT ASSIGNEE(S): Hadassah Medical Organization, Israel
SOURCE: Eur. Pat. Appl., 11 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
EP 354714	A2	19900214	EP 1989-307825		19890801
EP 354714	A3	19910410			
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE					
JP 02073019	A2	19900313	JP 1989-209522		19890811
EP 354818	A2	19900214	EP 1989-308214		19890814
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE					
JP 02256610	A2	19901017	JP 1989-209998		19890814
PRIORITY APPLN. INFO.:			IL 1988-87444	A	19880812
			IL 1989-90993	A	19890716

GI

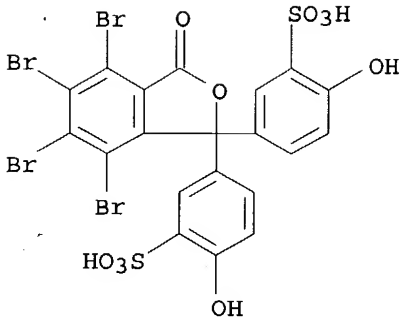
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The binding of bioactive peptides and proteins to glycosaminoglycans, e.g. in connective tissue, is modulated by **polymers** whose **monomer** units contain 3-10 aromatic rings. Preferred **monomers** are synthetic dyes; a typical **polymer** has the formula I (a, b, c = 0, 1; m = 5-20; dashed lines represent single or double bonds; X, Y, Z = NRR1, N:R, OR, :O, NO2, CO2H, halo, SO3R, SO3NHR, OSO3R, R; R = H, lower alkyl; R1 = R, substituted Ph) or especially II (a, b, c = 0, 1; a + b + c ≥ 2; m = 5-20). Compns. containing the **polymers** are useful for e.g. (1) removal of cationic proteins from the glomerular basement membrane to **prevent** local damage, (2) modulation of lipoprotein lipase, (3) release of growth-promoting mols., e.g. fibroblast growth factor, (4) blocking the activity of heparanase in inflammation and metastasis, (5) modulation of bone metabolism, and (6) **control** of the proliferation of smooth **muscle** cells and mesangial cells. Thus, the heparanase activity (correlated with metastatic potential) of mouse ESb lymphoma cells, as measured by release of low-mol.-weight fragments from heparan **sulfate**, was 78% inhibited by com. **aurintricarboxylic** acid (containing **polymers** of mol. weight 2000-20,000).
IT **9004-02-8**, Lipoprotein lipase

RL: BIOL (Biological study)
(binding of, by glycosaminoglycans of heart, Evan's blue-containing pharmaceuticals inhibition of)
RN 9004-02-8 HCAPLUS
CN Lipase, lipoprotein (9CI) (CA INDEX NAME)

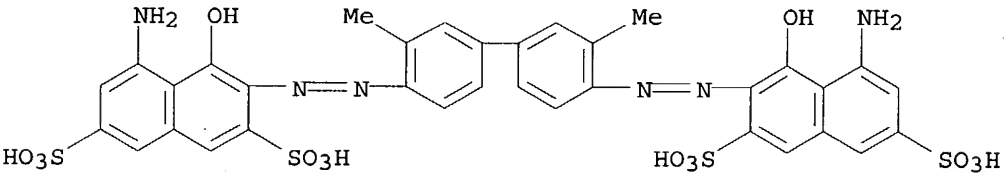
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
IT **89800-66-8**, Heparanase
RL: PROC (Process)
(inhibition of, of lymphoma by aromatic **polymer**-containing pharmaceuticals)
RN 89800-66-8 HCAPLUS
CN Heparanase (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
IT **71-67-0D**, **Sulfobromophthalein** sodium, **polymers**
72-57-1D, Trypan blue, **polymers 129-46-4D**,
Suramin sodium, **polymers 314-13-6D**, Evan's blue,
polymers 477-73-6D, Safranin O, **polymers**
548-24-3D, Eosine I Bluish, **polymers 548-62-9D**
, Crystal violet, **polymers 569-58-4D**, Aluminon, halo
and **sulfo** derivs., **polymers 569-64-2D**,
Malachite green, **polymers 574-64-1D**, Trypan red,
polymers 632-99-5D, Basic fuchsin, **polymers**
633-03-4D, Brilliant green, **polymers 2217-44-9D**
, Iodophthalein sodium, **polymers 2353-45-9D**, Fast
green FCF, **polymers 2390-59-2D**, Ethyl violet,
polymers 3244-88-0D, **polymers**
3861-73-2D, Anazolene sodium, **polymers**
4712-70-3D, **polymers 6035-94-5D**,
Pararosaniline acetate, **polymers 8004-87-3D**, Methyl
violet, **polymers 11121-48-5D**, Rose bengal,
polymers 12777-77-4D, Fast green, **polymers**
14855-76-6D, **polymers 16423-68-0D**,
polymers 17372-87-1D, Eosine yellowish, **polymers**
28983-56-4D, Methyl blue, **polymers 61489-48-3D**
, Aniline blue, **polymers 78642-64-5D**, Coomassie blue,
polymers
RL: BIOL (Biological study)
(peptide and protein binding by glycosaminoglycans modulation by pharmaceuticals containing)
RN 71-67-0 HCAPLUS
CN Benzenesulfonic acid, 3,3'-(4,5,6,7-tetrabromo-3-oxo-1(3H)-isobenzofuranylidene)bis[6-hydroxy-, disodium salt (9CI) (CA INDEX NAME)



●2 Na

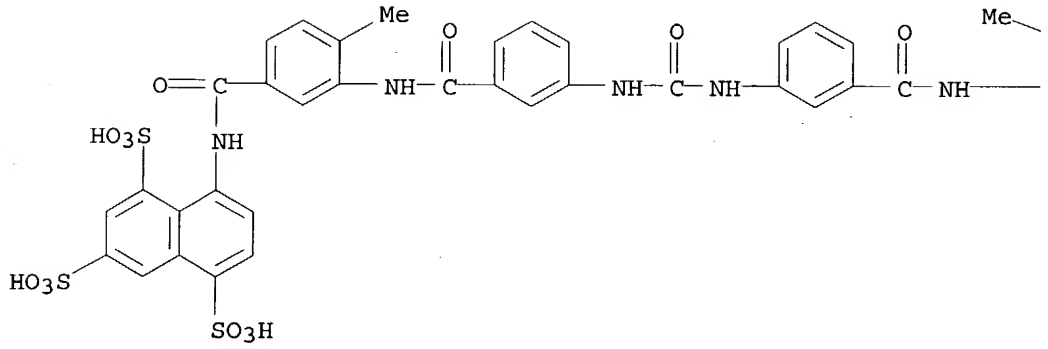
RN 72-57-1 HCAPLUS
CN 2,7-Naphthalenedisulfonic acid, 3,3'-[(3,3'-dimethyl[1,1'-biphenyl]-4,4'-diyl)bis(azo)]bis[5-amino-4-hydroxy-, tetrasodium salt (9CI) (CA INDEX NAME)



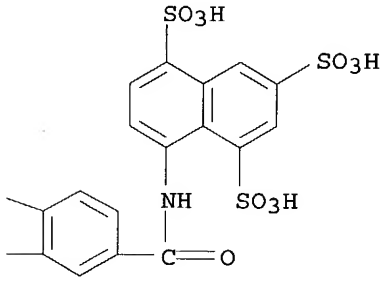
●4 Na

RN 129-46-4 HCAPLUS
CN 1,3,5-Naphthalenetrisulfonic acid, 8,8'-[carbonylbis[imino-3,1-phenylenecarbonylimino(4-methyl-3,1-phenylene)carbonylimino]]bis-, hexasodium salt (9CI) (CA INDEX NAME)

PAGE 1-A

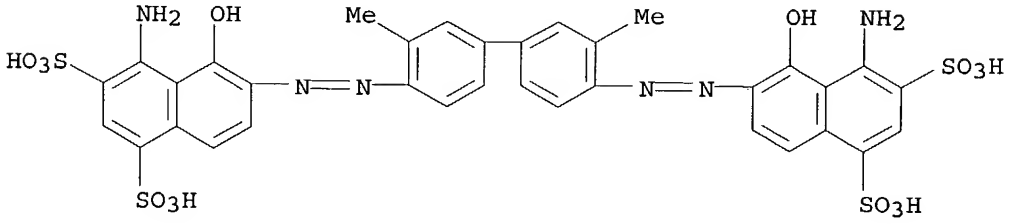


PAGE 1-B



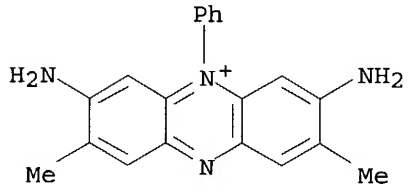
●6 Na

RN 314-13-6 HCAPLUS
CN 1,3-Naphthalenedisulfonic acid, 6,6'-[(3,3'-dimethyl[1,1'-biphenyl]-4,4'-diyl)bis(azo)]bis[4-amino-5-hydroxy-, tetrasodium salt (9CI) (CA INDEX NAME)



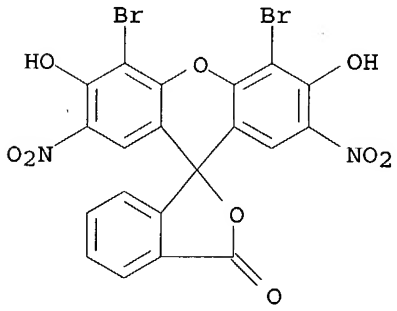
●4 Na

RN 477-73-6 HCAPLUS
CN Phenazinium, 3,7-diamino-2,8-dimethyl-5-phenyl-, chloride (9CI) (CA INDEX NAME)



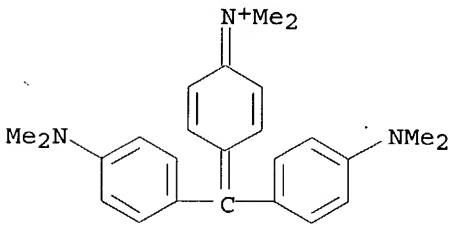
● Cl⁻

RN 548-24-3 HCAPLUS
CN Spiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3-one, 4',5'-dibromo-3',6'-dihydroxy-2',7'-dinitro-, disodium salt (9CI) (CA INDEX NAME)



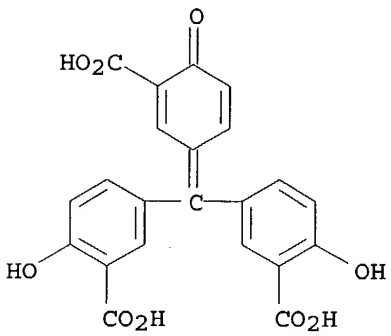
● 2 Na

RN 548-62-9 HCAPLUS
CN Methanaminium, N-[4-[bis[4-(dimethylamino)phenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, chloride (9CI) (CA INDEX NAME)



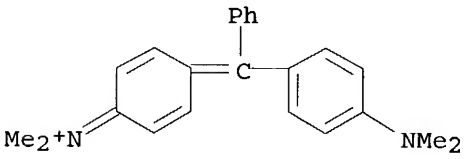
● Cl⁻

RN 569-58-4 HCAPLUS
CN Benzoic acid, 5-[(3-carboxy-4-hydroxyphenyl)(3-carboxy-4-oxo-2,5-cyclohexadien-1-ylidene)methyl]-2-hydroxy-, triammonium salt (9CI) (CA INDEX NAME)



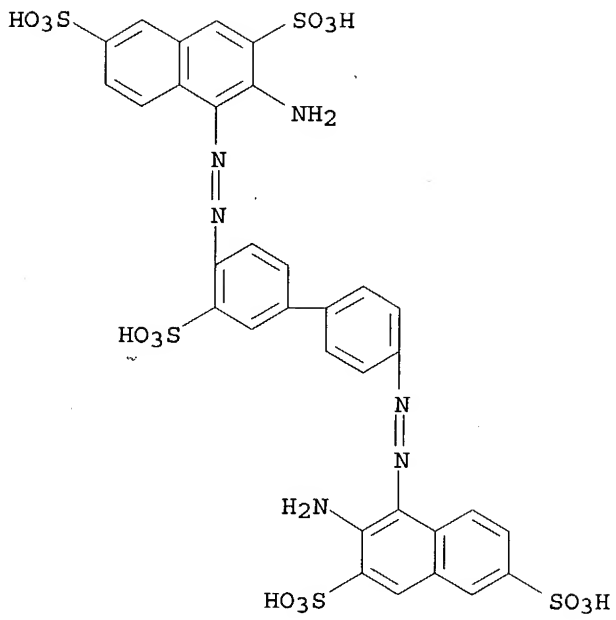
● 3 NH_3

RN 569-64-2 HCAPLUS
CN Methanaminium, N-[4-[[4-(dimethylamino)phenyl]phenylmethylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, chloride (9CI) (CA INDEX NAME)



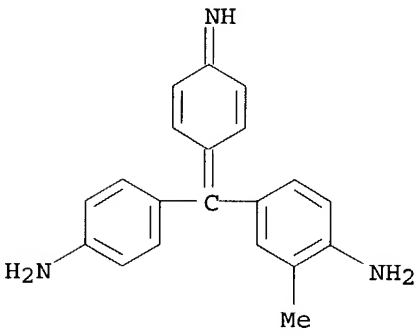
● Cl^-

RN 574-64-1 HCAPLUS
CN 2,7-Naphthalenedisulfonic acid, 4,4'-[(3-sulfo[1,1'-biphenyl]-4,4'-diyl)bis(azo)]bis[3-amino-, pentasodium salt (9CI) (CA INDEX NAME)



● 5 Na

RN 632-99-5 HCAPLUS
CN Benzenamine, 4-[(4-aminophenyl)(4-imino-2,5-cyclohexadien-1-ylidene)methyl]-2-methyl-, monohydrochloride (9CI) (CA INDEX NAME)

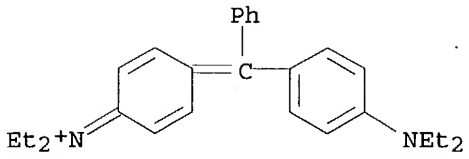


● HCl

RN 633-03-4 HCAPLUS
CN Ethanaminium, N-[4-[[4-(diethylamino)phenyl]phenylmethylene]-2,5-cyclohexadien-1-ylidene]-N-ethyl-, sulfate (1:1) (9CI) (CA INDEX NAME)

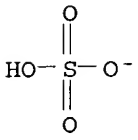
CM 1

CRN 18198-35-1
CMF C27 H33 N2

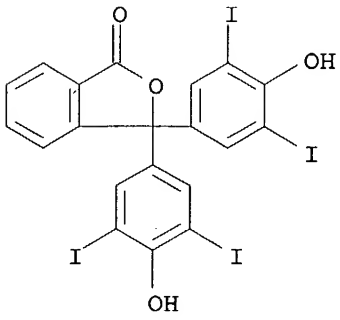


CM 2

CRN 14996-02-2
CMF H O4 S

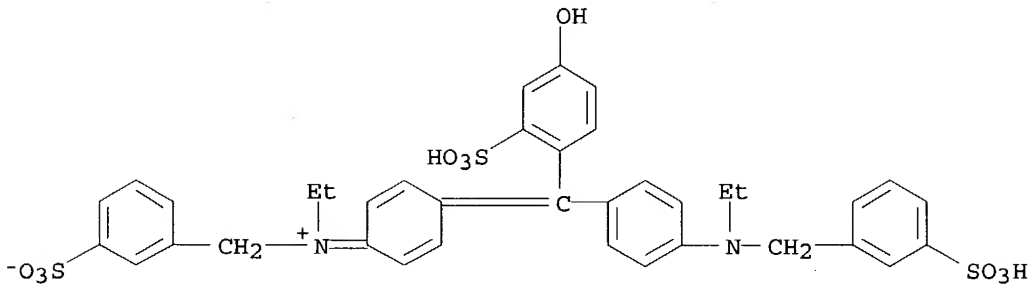


RN 2217-44-9 HCAPLUS
CN 1(3H)-Isobenzofuranone, 3,3-bis(4-hydroxy-3,5-diiodophenyl)-, disodium salt (9CI) (CA INDEX NAME)



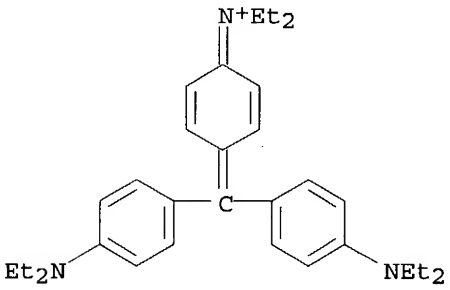
●2 Na

RN 2353-45-9 HCAPLUS
CN Benzenemethanaminium, N-ethyl-N-[4-[[4-[ethyl[(3-sulfophenyl)methyl]amino]phenyl](4-hydroxy-2-sulfophenyl)methylene]-2,5-cyclohexadien-1-ylidene]-3-sulfo-, inner salt, disodium salt (9CI) (CA INDEX NAME)



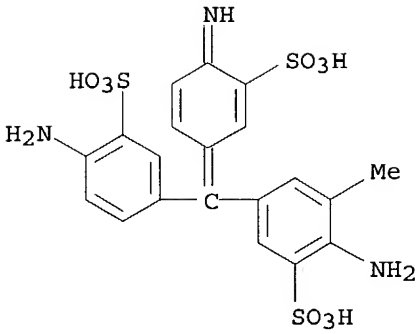
● 2 Na

RN 2390-59-2 HCAPLUS
CN Ethanaminium, N-[4-[bis[4-(diethylamino)phenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-ethyl-, chloride (9CI) (CA INDEX NAME)



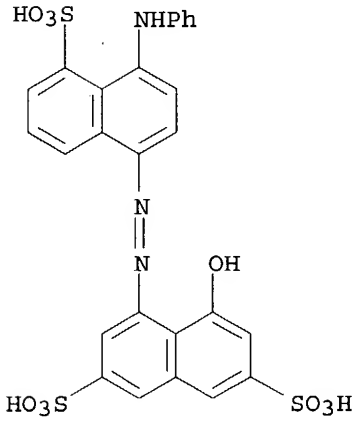
● Cl^-

RN 3244-88-0 HCAPLUS
CN Benzenesulfonic acid, 2-amino-5-[(4-amino-3-sulfophenyl)(4-imino-3-sulfo-2,5-cyclohexadien-1-ylidene)methyl]-3-methyl-, disodium salt (9CI) (CA INDEX NAME)



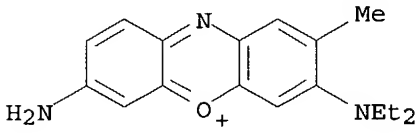
●2 Na

RN 3861-73-2 HCAPLUS
CN 2,7-Naphthalenedisulfonic acid, 4-hydroxy-5-[[4-(phenylamino)-5-sulfo-1-naphthalenyl]azo]-, trisodium salt (9CI) (CA INDEX NAME)



●3 Na

RN 4712-70-3 HCAPLUS
CN Phenoxazin-5-ium, 7-amino-3-(diethylamino)-2-methyl-, chloride (9CI) (CA INDEX NAME)

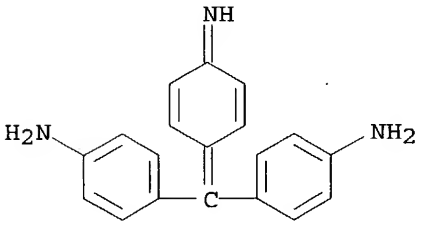


● Cl⁻

RN 6035-94-5 HCAPLUS
CN Benzenamine, 4-[(4-aminophenyl)(4-imino-2,5-cyclohexadien-1-ylidene)methyl]-, monoacetate (9CI) (CA INDEX NAME)

CM 1

CRN 479-73-2
CMF C19 H17 N3



CM 2

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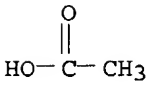
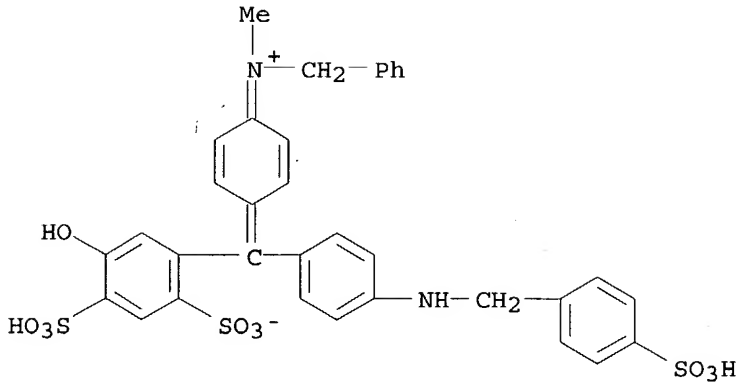


RN 8004-87-3 HCAPLUS
CN C.I. Basic Violet 1 (7CI, 8CI, 9CI) (CA INDEX NAME)

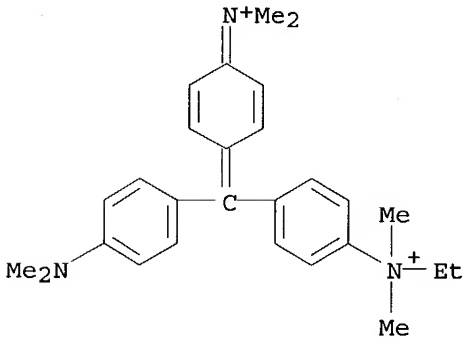
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 11121-48-5 HCAPLUS
CN Rose Bengal (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 12777-77-4 HCAPLUS
CN Benzenemethanaminium, N-[4-[(5-hydroxy-2,4-disulfophenyl)[4-[[(4-sulfophenyl)methyl]amino]phenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, inner salt, disodium salt (9CI) (CA INDEX NAME)



●2 Na

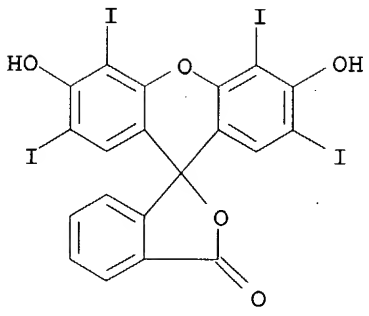
RN 14855-76-6 HCAPLUS
CN Benzenaminium, 4-[[4-(dimethylamino)phenyl][4-(dimethyliminio)-2,5-cyclohexadien-1-ylidene]methyl]-N-ethyl-N,N-dimethyl-, bromide chloride (9CI) (CA INDEX NAME)



● Br^-

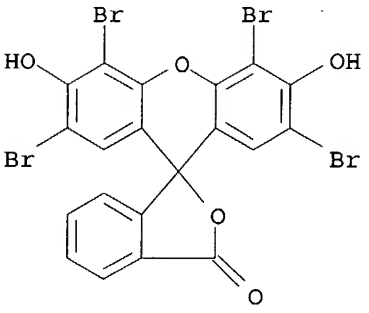
● Cl^-

RN 16423-68-0 HCAPLUS
CN Spiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3-one, 3',6'-dihydroxy-2',4',5',7'-tetraiodo-, disodium salt (9CI) (CA INDEX NAME)



●2 Na

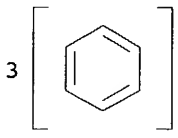
RN 17372-87-1 HCAPLUS
CN Spiro[isobenzofuran-1(3H),9'-[9H]xanthen]-3-one, 2',4',5',7'-tetrabromo-3',6'-dihydroxy-, disodium salt (9CI) (CA INDEX NAME)

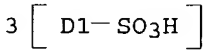


●2 Na

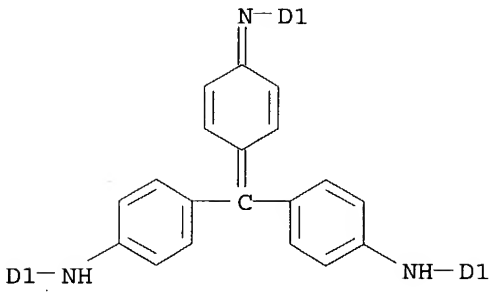
RN 28983-56-4 HCAPLUS
CN Benzenesulfonic acid, [[4-[bis[4-[(sulfophenyl)amino]phenyl]methylene]-2,5-cyclohexadien-1-ylidene]amino]-, disodium salt (9CI) (CA INDEX NAME)

PAGE 1-A





PAGE 2-A



●2 Na

RN 61489-48-3 HCAPLUS
CN Aniline blue (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
RN 78642-64-5 HCAPLUS
CN Coomassie Blue (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

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                515-74-2 OR 1080-06-4 OR 128635-03-0 OR 250375-83-8 OR
                197014-62-3 OR 923-06-8 OR 76652-44-3 OR 182230-28-0)/RN
L13       12395 SEA FILE=HCAPLUS ABB=ON  L11
L14          16 SEA FILE=HCAPLUS ABB=ON  L13 AND ?FIBROS?
L15           6 SEA FILE=HCAPLUS ABB=ON  L14 AND (PD<19990720 OR PRD<19990720)

L16           4 SEA FILE=HCAPLUS ABB=ON  L15 AND (?TREAT? OR ?PREVENT? OR
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                OR 54947-67-0/BI OR 5966-29-0/BI OR 764-22-7/BI OR 10160-28-8/
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L40           3 SEA FILE=HCAPLUS ABB=ON  L16 AND L39
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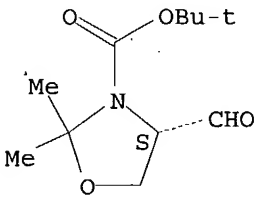
L40 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1999:529160 HCAPLUS
DOCUMENT NUMBER: 131:165335
TITLE: Sphingolipid derivatives, their preparation, and their **therapeutic** use
INVENTOR(S): Liotta, Dennis C.; Merrill, Alfred H., Jr.; Keane, Thomas E.; Schmelz, Eva M.; Bhalla, Kapil N.
PATENT ASSIGNEE(S): Emory University, USA
SOURCE: PCT Int. Appl., 140 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 9941266	A1	19990819	WO 1999-US3093		19990212 <--
W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM					
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG					
CA 2320117	AA	19990819	CA 1999-2320117		19990212 <--
AU 9927644	A1	19990830	AU 1999-27644		19990212 <--
AU 765809	B2	20031002			
EP 1053243	A1	20001122	EP 1999-908143		19990212 <--
R: DE, FR, GB, IT, IE					
US 6610835	B1	20030826	US 1999-249211		19990212 <--
US 2004039212	A1	20040226	US 2003-647801		20030825 <--
PRIORITY APPLN. INFO.:			US 1998-74536P	P	19980212 <--
			US 1999-249211	A1	19990212 <--
			WO 1999-US3093	W	19990212 <--

OTHER SOURCE(S): MARPAT 131:165335
AB Derivs. of sphingolipids (Markush included) are provided. The compds. are useful in the **treatment** of abnormal cell proliferation, including benign and malignant tumors, the promotion of cell differentiation, the induction of apoptosis, the inhibition of protein kinase C, and the **treatment** of inflammatory conditions, psoriasis, inflammatory bowel disease as well as proliferation of smooth muscle cells in the course of development of plaques in vascular tissue. The invention also includes a method for triggering the release of cytochrome c from mitochondria that includes administering an effective amount of a sphingolipid or its derivative or prodrug to a host in need thereof.
Further, the invention provides a method for **treating** bacterial infections, including those that influence colon cancer and other disorders of the intestine, that includes administering an effective amount of one of the active compds. identified herein.
IT **102308-32-7P 108149-60-6P 115464-01-2P**
119837-81-9P 119837-87-5P 128098-41-9P
131606-77-4P 132260-32-3P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction; sphingolipid derivative preparation and **therapeutic** use)

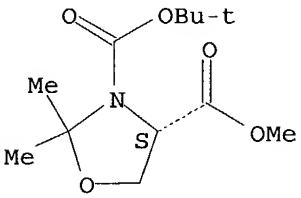
RN 102308-32-7 HCAPLUS
CN 3-Oxazolidinecarboxylic acid, 4-formyl-2,2-dimethyl-, 1,1-dimethylethyl ester, (4S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



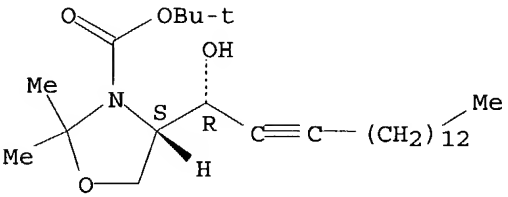
RN 108149-60-6 HCAPLUS
CN 3,4-Oxazolidinedicarboxylic acid, 2,2-dimethyl-, 3-(1,1-dimethylethyl) 4-methyl ester, (4S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

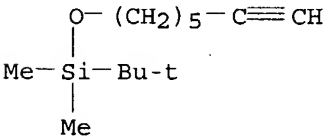


RN 115464-01-2 HCAPLUS
CN 3-Oxazolidinecarboxylic acid, 4-[(1R)-1-hydroxy-2-hexadecynyl]-2,2-dimethyl-, 1,1-dimethylethyl ester, (4S)- (9CI) (CA INDEX NAME)

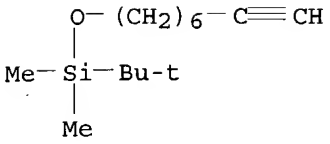
Absolute stereochemistry.



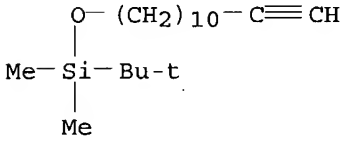
RN 119837-81-9 HCAPLUS
CN Silane, (1,1-dimethylethyl)(6-heptynyloxy)dimethyl- (9CI) (CA INDEX NAME)



RN 119837-87-5 HCAPLUS
CN Silane, (1,1-dimethylethyl)dimethyl(7-octynyloxy)- (9CI) (CA INDEX NAME)

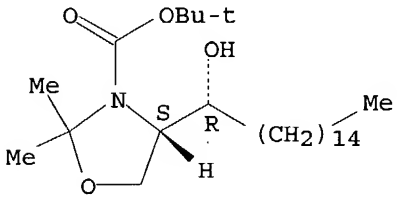


RN 128098-41-9 HCAPLUS
CN Silane, (1,1-dimethylethyl)(11-dodecynyloxy)dimethyl- (9CI) (CA INDEX NAME)

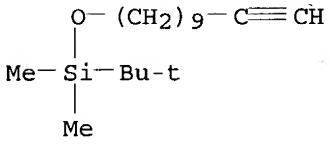


RN 131606-77-4 HCAPLUS
CN 3-Oxazolidinecarboxylic acid, 4-[(1R)-1-hydroxyhexadecyl]-2,2-dimethyl-, 1,1-dimethylethyl ester, (4S)- (9CI) (CA INDEX NAME)

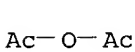
Absolute stereochemistry. Rotation (-).



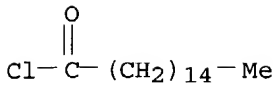
RN 132260-32-3 HCAPLUS
CN Silane, (1,1-dimethylethyl)dimethyl(10-undecynyloxy)- (9CI) (CA INDEX NAME)



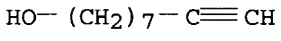
IT **108-24-7**, Acetic anhydride **112-67-4**, Palmitoyl chloride **10160-28-8**, 8-Nonyn-1-ol **116355-83-0**, Fumonisin B1 **125348-17-6 145040-09-1**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction; sphingolipid derivative preparation and **therapeutic** use)
RN 108-24-7 HCAPLUS
CN Acetic acid, anhydride (9CI) (CA INDEX NAME)



RN 112-67-4 HCAPLUS
CN Hexadecanoyl chloride (9CI) (CA INDEX NAME)

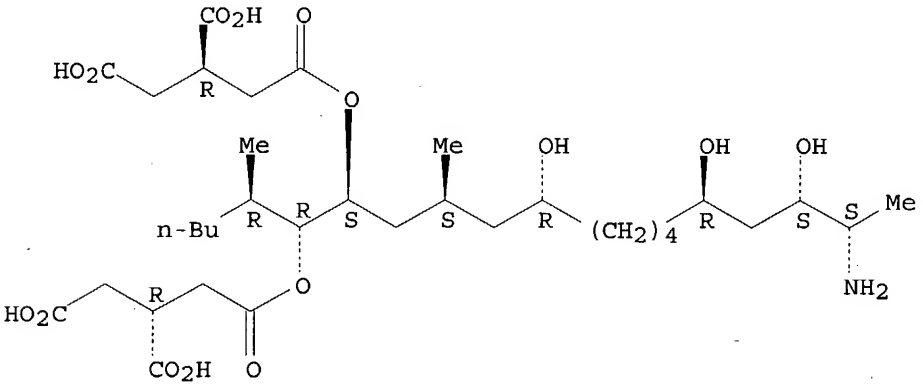


RN 10160-28-8 HCAPLUS
CN 8-Nonyn-1-ol (7CI, 9CI) (CA INDEX NAME)

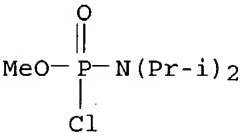


RN 116355-83-0 HCAPLUS
CN 1,2,3-Propanetricarboxylic acid, 1,1'-[(1S,2R)-1-[(2S,4R,9R,11S,12S)-12-amino-4,9,11-trihydroxy-2-methyltridecyl]-2-[(1R)-1-methylpentyl]-1,2-ethanediyl] ester, (2R,2'R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

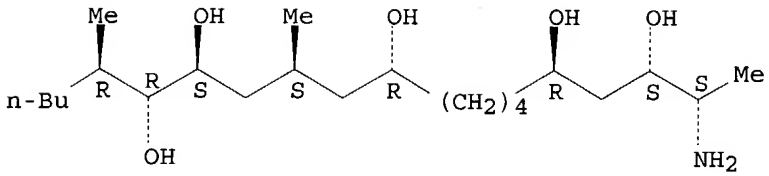


RN 125348-17-6 HCAPLUS
CN Phosphoramidochloridic acid, bis(1-methylethyl)-, methyl ester (9CI) (CA INDEX NAME)



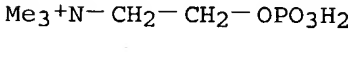
RN 145040-09-1 HCAPLUS
CN 3,5,10,14,15-Eicosanepentol, 2-amino-12,16-dimethyl-, (2S,3S,5R,10R,12S,14S,15R,16R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

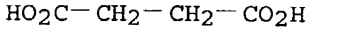


IT **107-73-3D**, Phosphocholine, fumonisin analog with **110-15-6D**
, Succinic acid, fumonisin analog with dextran linked by, biological studies **110-94-1D**, Glutaric acid, fumonisin analog with dextran linked by **764-22-7**, Sphinganine **764-22-7D**,
Sphinganine, acylated derivs. **1071-23-4D**, Phosphoethanolamine, fumonisin analog with **2238-89-3 2238-89-3D**, derivs.
2238-90-6 2238-90-6D, derivs. **5966-29-0**
5966-29-0D, acylated derivs. **13360-52-6D**, fumonisin analog with **14131-68-1D**, fumonisin analog with
34324-89-5 34324-89-5D, derivs. **54947-67-0**
54947-67-0D, derivs. **105561-73-7D**, derivs.
238429-56-6 238429-56-6D, derivs.
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(sphingolipid derivative preparation and **therapeutic** use)

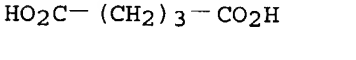
RN 107-73-3 HCAPLUS
CN Ethanaminium, N,N,N-trimethyl-2-(phosphonooxy)-, chloride (9CI) (CA INDEX NAME)



RN 110-15-6 HCAPLUS
CN Butanedioic acid (9CI) (CA INDEX NAME)

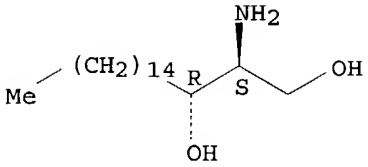


RN 110-94-1 HCAPLUS
CN Pentanedioic acid (9CI) (CA INDEX NAME)



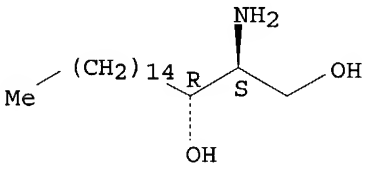
RN 764-22-7 HCAPLUS
CN 1,3-Octadecanediol, 2-amino-, (2S,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

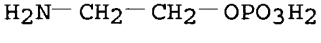


RN 764-22-7 HCAPLUS
CN 1,3-Octadecanediol, 2-amino-, (2S,3R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

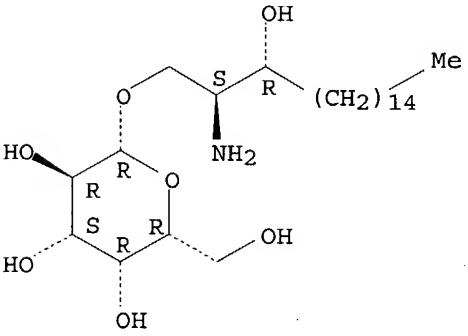


RN 1071-23-4 HCAPLUS
CN Ethanol, 2-amino-, dihydrogen phosphate (ester) (8CI, 9CI) (CA INDEX NAME)



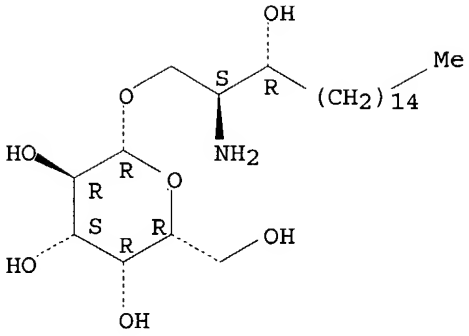
RN 2238-89-3 HCAPLUS
CN β-D-Galactopyranoside, (2S,3R)-2-amino-3-hydroxyoctadecyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



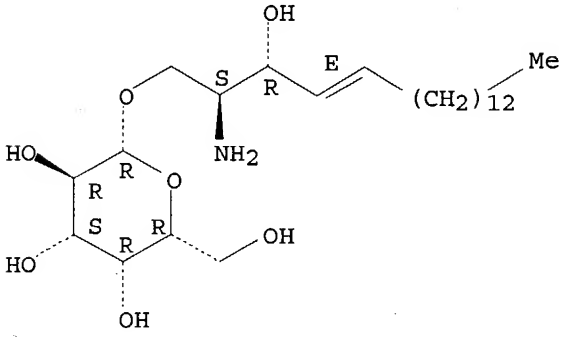
RN 2238-89-3 HCAPLUS
CN β-D-Galactopyranoside, (2S,3R)-2-amino-3-hydroxyoctadecyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.



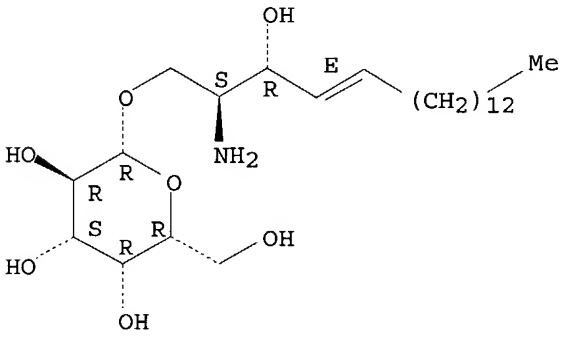
RN 2238-90-6 HCAPLUS
CN β-D-Galactopyranoside, (2S,3R,4E)-2-amino-3-hydroxy-4-octadecenyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



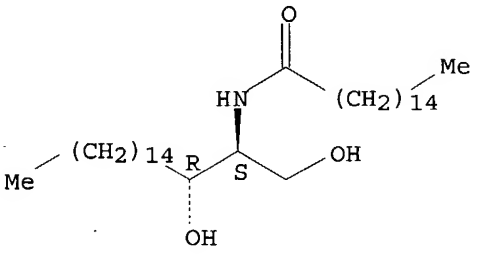
RN 2238-90-6 HCAPLUS
CN β-D-Galactopyranoside, (2S,3R,4E)-2-amino-3-hydroxy-4-octadecenyl (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



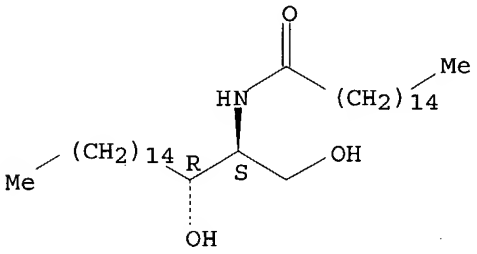
RN 5966-29-0 HCAPLUS
CN Hexadecanamide, N-[(1S,2R)-2-hydroxy-1-(hydroxymethyl)heptadecyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



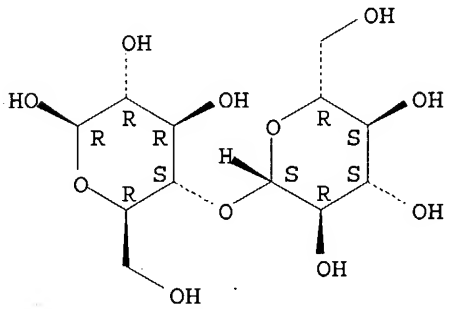
RN 5966-29-0 HCAPLUS
CN Hexadecanamide, N-[(1S,2R)-2-hydroxy-1-(hydroxymethyl)heptadecyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).



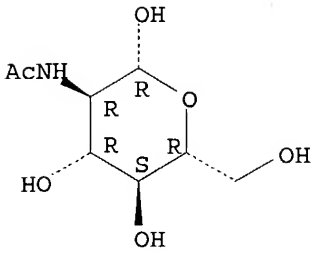
RN 13360-52-6 HCAPLUS
CN β-D-Glucopyranose, 4-O-β-D-glucopyranosyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



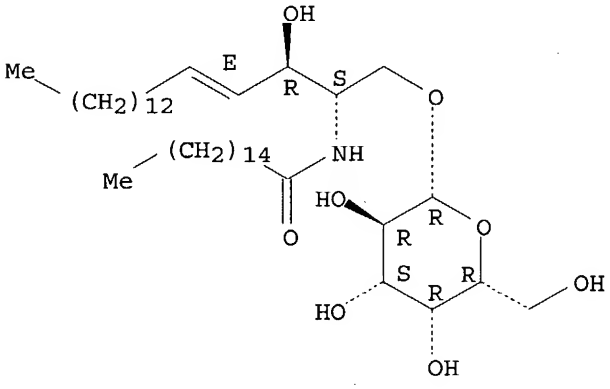
RN 14131-68-1 HCAPLUS
CN β-D-Glucopyranose, 2-(acetylamino)-2-deoxy- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



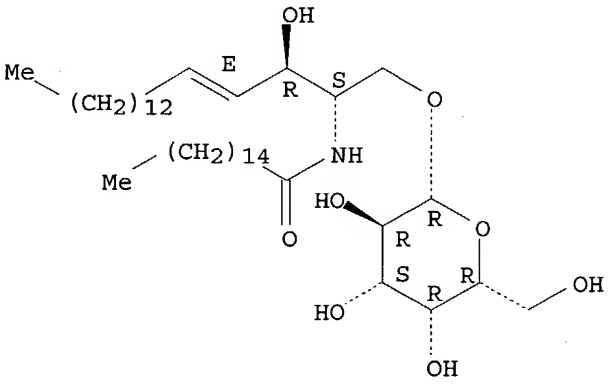
RN 34324-89-5 HCAPLUS
CN Hexadecanamide, N-[(1S,2R,3E)-1-[(β-D-galactopyranosyloxy)methyl]-2-hydroxy-3-heptadecenyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.



RN 34324-89-5 HCAPLUS
CN Hexadecanamide, N-[(1S,2R,3E)-1-[(β-D-galactopyranosyloxy)methyl]-2-hydroxy-3-heptadecenyl]- (9CI) (CA INDEX NAME)

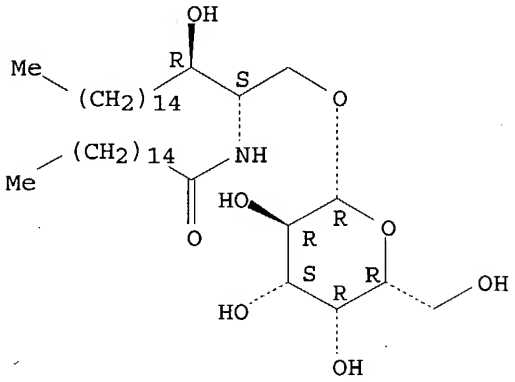
Absolute stereochemistry. Rotation (-).
Double bond geometry as shown.



RN 54947-67-0 HCAPLUS
CN Hexadecanamide, N-[(1R,2S)-1-[(β-D-galactopyranosyloxy)methyl]-2-

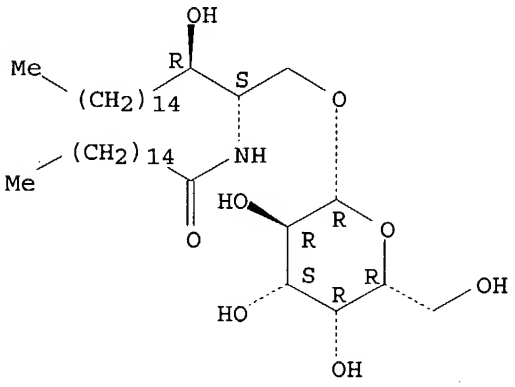
hydroxyheptadecyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



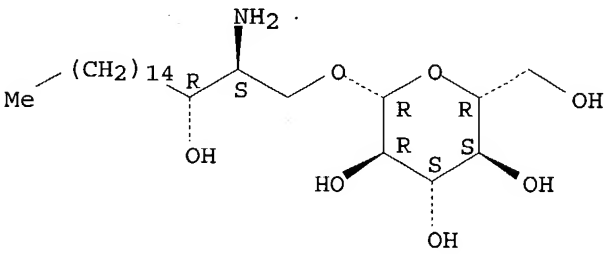
RN 54947-67-0 HCAPLUS
CN Hexadecanamide, N-[(1R,2S)-1-[(β-D-galactopyranosyloxy)methyl]-2-hydroxyheptadecyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 105561-73-7 HCAPLUS
CN β-D-Glucopyranoside, (2S,3R)-2-amino-3-hydroxyoctadecyl (9CI) (CA INDEX NAME)

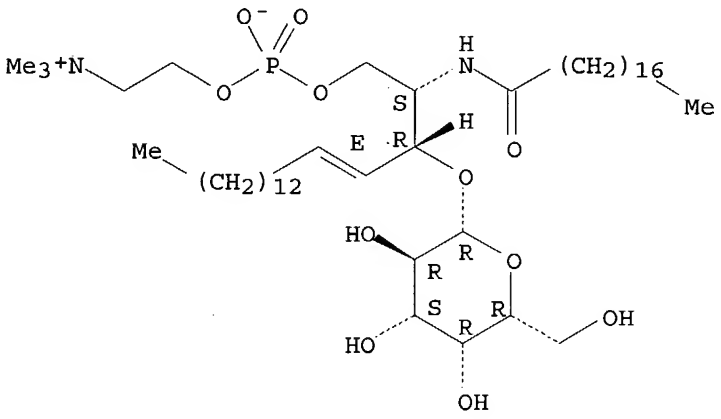
Absolute stereochemistry.



RN 238429-56-6 HCAPLUS

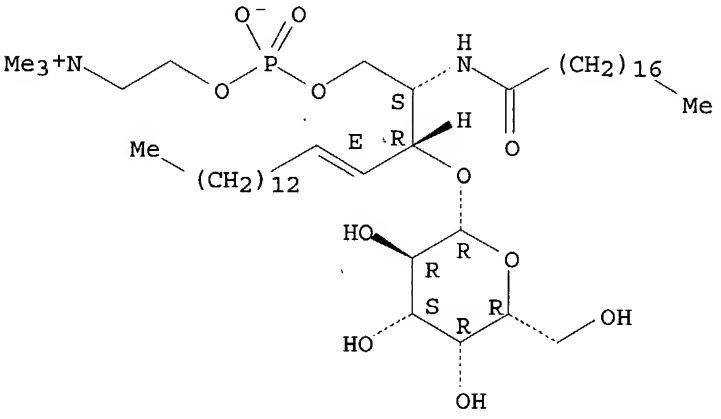
CN 3,5-Dioxa-8-aza-4-phosphahexacosan-1-aminium, 7-[(1R,2E)-1-(β-D-galactopyranosyloxy)-2-hexadecenyl]-4-hydroxy-N,N,N-trimethyl-9-oxo-, inner salt, 4-oxide, (7S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



RN 238429-56-6 HCAPLUS
CN 3,5-Dioxa-8-aza-4-phosphahexacosan-1-aminium, 7-[(1R,2E)-1-(β-D-galactopyranosyloxy)-2-hexadecenyl]-4-hydroxy-N,N,N-trimethyl-9-oxo-, inner salt, 4-oxide, (7S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



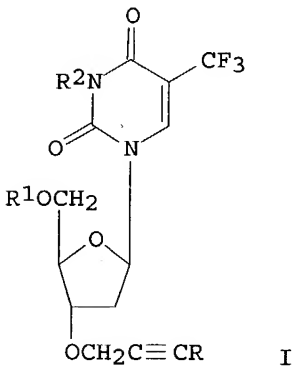
IT **141436-78-4**, Protein kinase C
RL: BPR (Biological process); BSU (Biological study, unclassified); BIOL (Biological study); PROC (Process)
(sphingolipid derivative preparation and **therapeutic** use)
RN 141436-78-4 HCAPLUS
CN Kinase (phosphorylating), protein, cPKC (9CI) (CA INDEX NAME)

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L40 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1993:192191 HCAPLUS
DOCUMENT NUMBER: 118:192191
TITLE: Trifluorothymidine derivatives, process for producing the same and anti-cancer agent containing the same
INVENTOR(S): Fukazawa, Nobuyuki; Fujiwara, Junya; Komatsu, Hironori; Kawauchi, Nobuya; Yano, Osamu; Iwata, Daiji; Nakanishi, Osamu; Edatsugi, Hajime
PATENT ASSIGNEE(S): Mitsui Toatsu Chemicals, Inc., Japan
SOURCE: Eur. Pat. Appl., 45 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 517262	A1	19921209	EP 1992-109574	19920605 <--
R: DE, FR, GB, IT				
JP 05178882	A2	19930720	JP 1992-145411	19920605 <--
PRIORITY APPLN. INFO.:			JP 1991-136046 A	19910607 <--

OTHER SOURCE(S): MARPAT 118:192191
GI

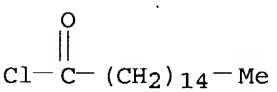


I

AB Trifluorothymidines I (R = H, alkyl; R1 = H, acyl, alkoxycarbonyl, carbamoyl, phosphonyl, protective group, propargyl; R2 = H, alkyl, acyl) were prepared Thus, trifluorothymidine was silylated, propargylated, benzoylated and desilylated to give I (R = R1 = H, R2 = Bz, II). Mice, infected with Meth A **fibrosarcoma** and **treated** with 68.1 mg/kg day II for 7 days developed tumors weighing only 2.6% of **control** tumors.

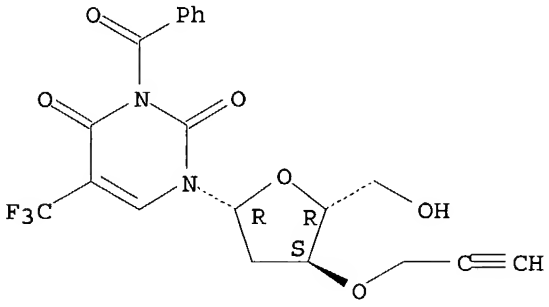
IT **112-67-4**, Palmitoyl chloride
RL: RCT (Reactant); RACT (Reactant or reagent)
(acylation by, of propargyltrifluorothymidine)

RN 112-67-4 HCAPLUS
CN Hexadecanoyl chloride (9CI) (CA INDEX NAME)



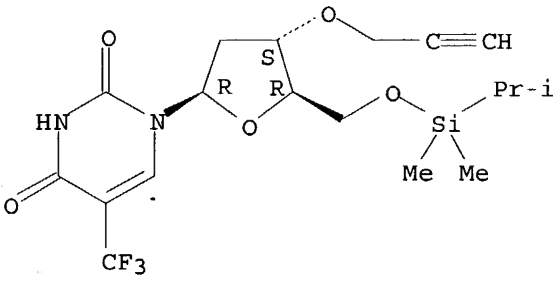
IT **146536-05-2P 146536-06-3P 146536-11-0P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation and antitumor activity of)
RN 146536-05-2 HCAPLUS
CN Thymidine, 3-benzoyl-α,α,α-trifluoro-3'-O-2-propynyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



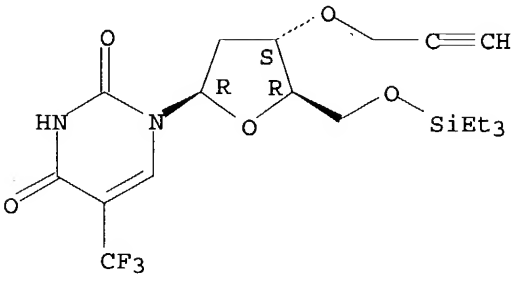
RN 146536-06-3 HCAPLUS
CN Thymidine, 5'-O-[dimethyl(1-methylethyl)silyl]-α,α,α-trifluoro-3'-O-2-propynyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



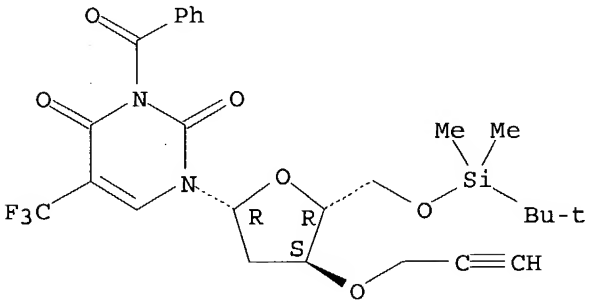
RN 146536-11-0 HCAPLUS
CN Thymidine, α,α,α-trifluoro-3'-O-2-propynyl-5'-O-(triethylsilyl)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



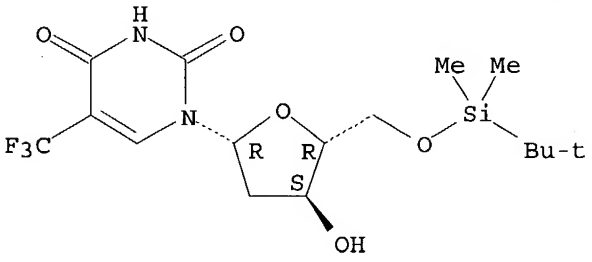
IT **146536-04-1P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and desilylation of)
RN 146536-04-1 HCAPLUS
CN Thymidine, 3-benzoyl-5'-O-[(1,1-dimethylethyl)dimethylsilyl]-α,α,α-trifluoro-3'-O-2-propynyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



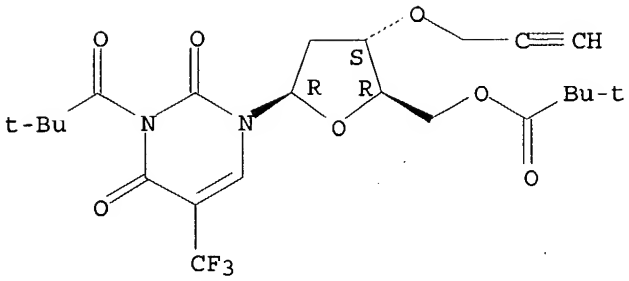
IT **127978-84-1P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and propargylation of)
RN 127978-84-1 HCAPLUS
CN Thymidine, 5'-O-[(1,1-dimethylethyl)dimethylsilyl]-α,α,α-trifluoro- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



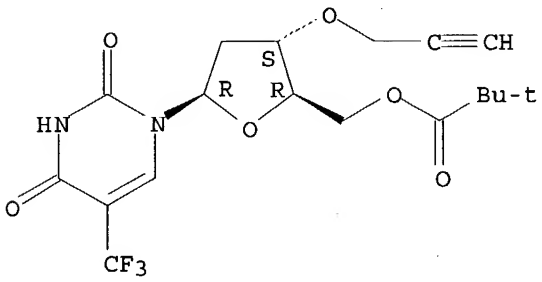
IT **146536-02-9P 146536-03-0P 146536-07-4P**
146536-08-5P 146536-09-6P 146536-10-9P
146536-12-1P 146536-13-2P 146536-14-3P
146536-15-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 146536-02-9 HCAPLUS
CN Thymidine, 3-(2,2-dimethyl-1-oxopropyl)-α,α,α-trifluoro-3'-O-2-propynyl-, 5'-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



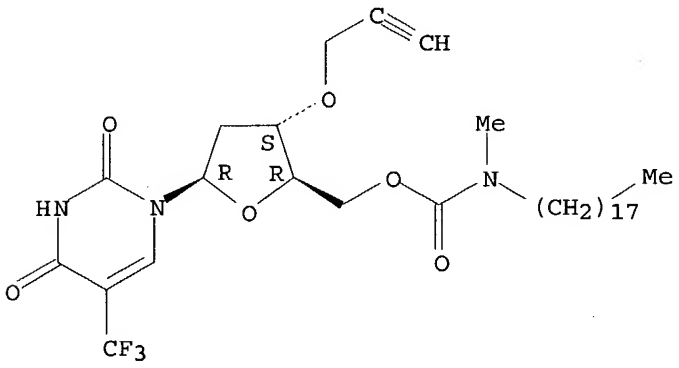
RN 146536-03-0 HCAPLUS
CN Thymidine, α,α,α-trifluoro-3'-O-2-propynyl-, 5'-(2,2-dimethylpropanoate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



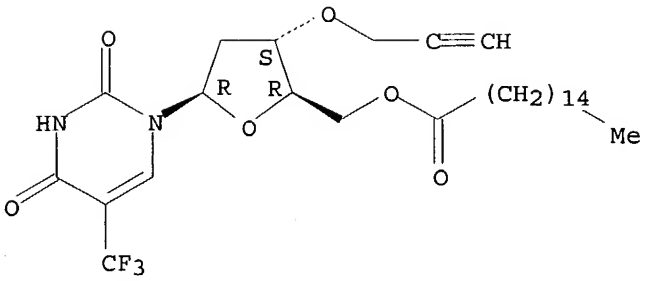
RN 146536-07-4 HCAPLUS
CN Thymidine, α,α,α-trifluoro-3'-O-2-propynyl-, 5'-(methyloctadecylcarbamate) (9CI) (CA INDEX NAME)

Absolute stereochemistry.



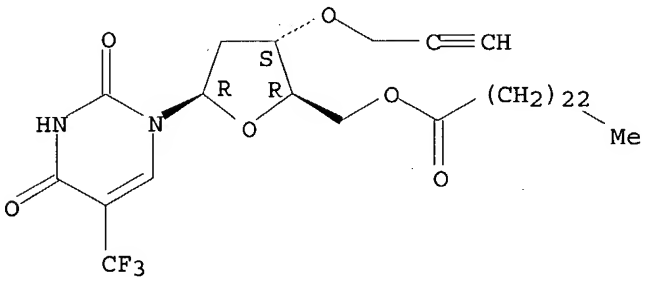
RN 146536-08-5 HCAPLUS
CN Thymidine, α,α,α-trifluoro-3'-O-2-propynyl-, 5'-hexadecanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



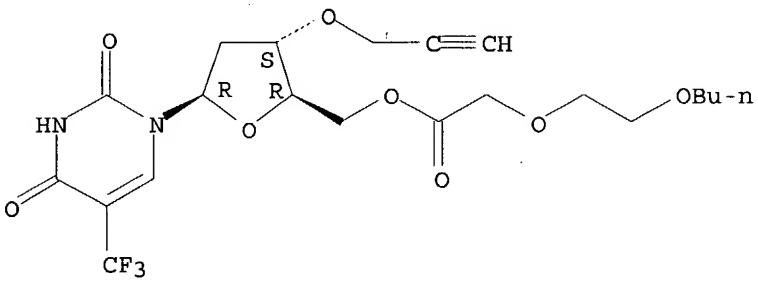
RN 146536-09-6 HCAPLUS
CN Thymidine, α,α,α-trifluoro-3'-O-2-propynyl-, 5'-tetracosanoate (9CI) (CA INDEX NAME)

Absolute stereochemistry.



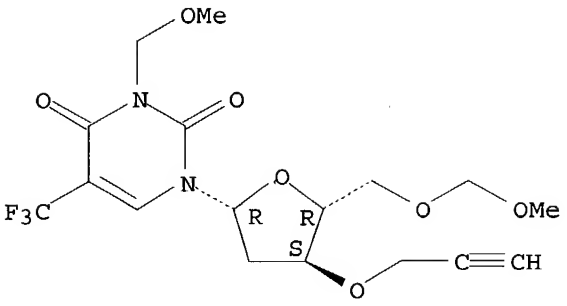
RN 146536-10-9 HCAPLUS
CN Thymidine, α,α,α-trifluoro-3'-O-2-propynyl-, 5'-[(2-butoxyethoxy)acetate] (9CI) (CA INDEX NAME)

Absolute stereochemistry.



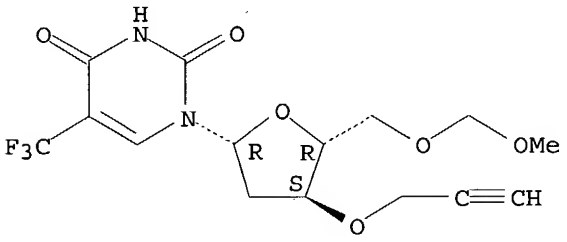
RN 146536-12-1 HCAPLUS
CN Thymidine, α,α,α-trifluoro-3-(methoxymethyl)-5'-O-(methoxymethyl)-3'-O-2-propynyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



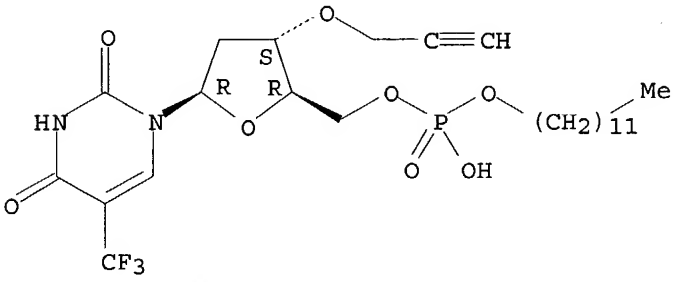
RN 146536-13-2 HCAPLUS
CN Thymidine, α,α,α-trifluoro-5'-O-(methoxymethyl)-3'-O-2-propynyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



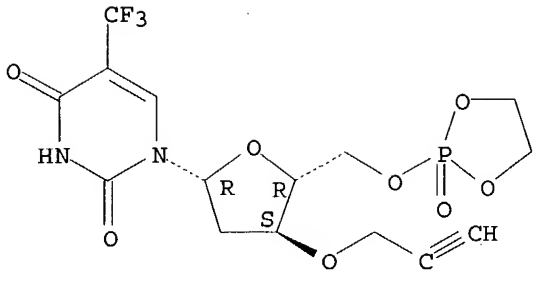
RN 146536-14-3 HCAPLUS
CN 5'-Thymidylic acid, α,α,α-trifluoro-3'-O-2-propynyl-, monododecyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



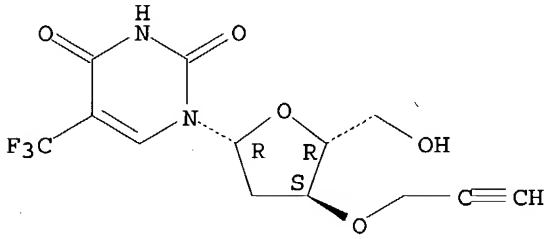
RN 146536-15-4 HCAPLUS
CN Thymidine, α,α,α-trifluoro-5'-O-(2-oxido-1,3,2-dioxaphospholan-2-yl)-3'-O-2-propynyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



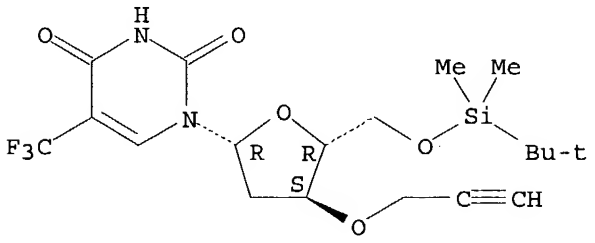
IT **146536-01-8P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)
(preparation, acylation, and antitumor activity of)
RN 146536-01-8 HCAPLUS
CN Thymidine, α,α,α-trifluoro-3'-O-2-propynyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT **146536-00-7P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent)
(preparation, desilylation, and antitumor activity of)
RN 146536-00-7 HCAPLUS
CN Thymidine, 5'-O-[(1,1-dimethylethyl)dimethylsilyl]-α,α,α-trifluoro-3'-O-2-propynyl- (9CI) (CA INDEX NAME)

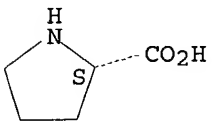
Absolute stereochemistry.



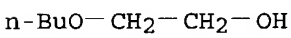
IT **147-85-3**, Proline, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with 1-bromododecane)

RN 147-85-3 HCAPLUS
CN L-Proline (9CI) (CA INDEX NAME)

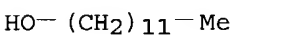
Absolute stereochemistry. Rotation (-).



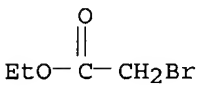
IT **111-76-2**, 2-Butoxyethanol
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with bromoacetate)
RN 111-76-2 HCAPLUS
CN Ethanol, 2-butoxy- (8CI, 9CI) (CA INDEX NAME)



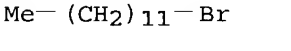
IT **112-53-8**, Dodecanol
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with dichlorophosphate and propargyltrifluorothymidine)
RN 112-53-8 HCAPLUS
CN 1-Dodecanol (9CI) (CA INDEX NAME)



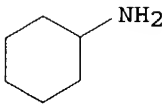
IT **105-36-2**, Ethyl bromoacetate
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with nonylpiperazine)
RN 105-36-2 HCAPLUS
CN Acetic acid, bromo-, ethyl ester (6CI, 8CI, 9CI) (CA INDEX NAME)



IT **143-15-7**, 1-Bromododecane
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with proline)
RN 143-15-7 HCAPLUS
CN Dodecane, 1-bromo- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



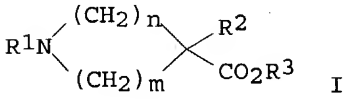
IT **108-91-8**, Cyclohexylamine, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with propargyltrifluorothymidine and carbonyl-diimidazole)
RN 108-91-8 HCAPLUS
CN Cyclohexanamine (9CI) (CA INDEX NAME)



L40 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1987:156280 HCAPLUS
DOCUMENT NUMBER: 106:156280
TITLE: 1-(Alkenoyl)azacycloalkanecarboxylic acids and derivatives as protease inhibitors
INVENTOR(S): Mueller, Richard August; Partis, Richard Allen
PATENT ASSIGNEE(S): G.D. Searle and Co., USA
SOURCE: Eur. Pat. Appl., 28 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE	
EP 208279	A1	19870114	EP 1986-109171		19860704	<--
EP 208279	B1	19890913				
R: BE, CH, DE, FR, GB, IT, LI, NL, SE						
US 4649147	A	19870310	US 1985-752873		19850708	<--
AU 8659745	A1	19870115	AU 1986-59745		19860704	<--
AU 583400	B2	19890427				
CA 1276152	A1	19901113	CA 1986-513098		19860704	<--
JP 62010061	A2	19870119	JP 1986-159532		19860707	<--
JP 07051559	B4	19950605				
ZA 8605026	A	19870930	ZA 1986-5026		19860707	<--
PRIORITY APPLN. INFO.:			US 1985-752873	A	19850708	<--

GI



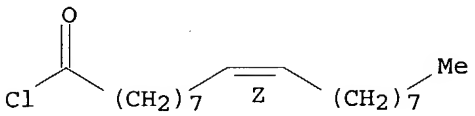
I

AB Title compds. I (R1 = C14-22 alkenoyl, alkadienoyl, alkapolyenoyl; R2 = H, Ph; R3 = H, C1-6 alkyl, alkali metal, alkaline earth metal, NR4R5R6R7; R4-R7 = H, C1-6 alkyl, C2-4 hydroxyalkyl; m = 0-2; n = 1-5; m + n = 2-5), useful for **prevention** of degradation of elastin or other proteins, thus **preventing** or retarding the diseases caused by such degradation, were prepared by acylation of I (R1 = H) with R1X (X = halo). To L-proline and Et3N in CH2Cl2 was added (Z)-Me(CH2)7CH:CH(CH2)7COCl to give I [R1 = (Z)-Me(CH2)7CH:CH(CH2)7CO, R2, R3 = H, m = 0, n = 3) (II). II inhibited elastase and prolyl-4-hydroxylase with IC50 of 7.8 mcM and 4.4 mcM, resp.

IT **112-77-6**, Oleoyl chloride
RL: RCT (Reactant); RACT (Reactant or reagent)
(acylation by, of proline)

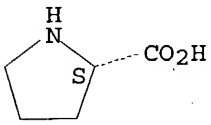
RN 112-77-6 HCAPLUS
CN 9-Octadecenoyl chloride, (9Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



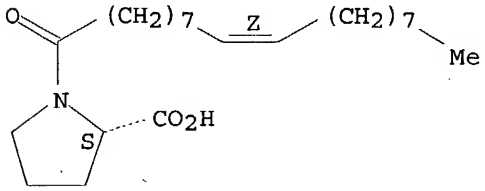
IT **147-85-3**, L-Proline, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(acylation of, by oleoyl chloride)
RN 147-85-3 HCAPLUS
CN L-Proline (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



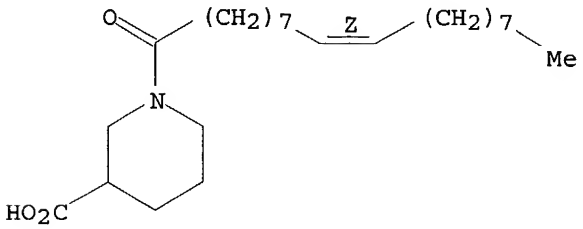
IT **107432-37-1P 107432-38-2P 107432-39-3P**
107432-40-6P 107432-41-7P 107432-42-8P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as protease inhibitor)
RN 107432-37-1 HCAPLUS
CN L-Proline, 1-(1-oxo-9-octadecenyl)-, (Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.



RN 107432-38-2 HCAPLUS
CN 3-Piperidinecarboxylic acid, 1-(1-oxo-9-octadecenyl)-, (Z)- (9CI) (CA INDEX NAME)

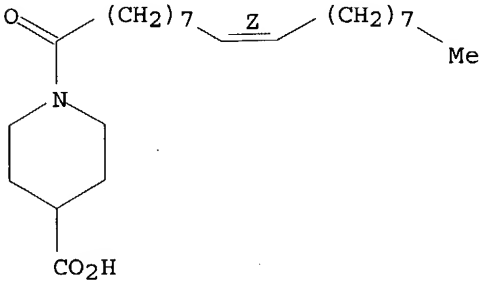
Double bond geometry as shown.



RN 107432-39-3 HCAPLUS

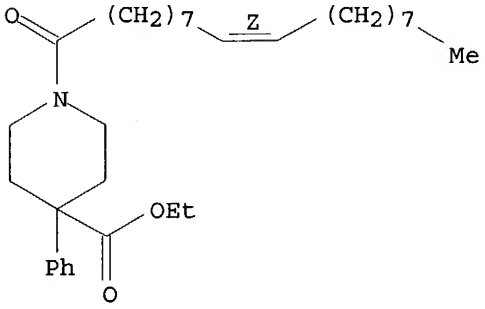
CN 4-Piperidinecarboxylic acid, 1-(1-oxo-9-octadecenyl)-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



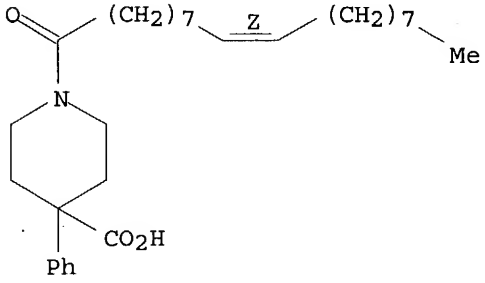
RN 107432-40-6 HCAPLUS
CN 4-Piperidinecarboxylic acid, 1-(1-oxo-9-octadecenyl)-4-phenyl-, ethyl ester, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



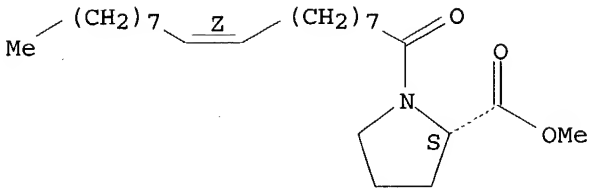
RN 107432-41-7 HCAPLUS
CN 4-Piperidinecarboxylic acid, 1-(1-oxo-9-octadecenyl)-4-phenyl-, (Z)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



RN 107432-42-8 HCAPLUS
CN L-Proline, 1-(1-oxo-9-octadecenyl)-, methyl ester, (Z)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.
Double bond geometry as shown.


Me
(CH2)7
Z
(CH2)7
O
N
O
S
OMe